

DOCUMENT RESUME

ED 065 802

CG 007 357

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TITLE Health Care, Health and Illness Behavior of Low
Income Families in the State of Maine.
INSTITUTION Maine's Regional Medical Program Research and
Evaluation Service, Augusta.
PUB DATE Jan 71
NOTE 223p.
EDRS PRICE MF-\$0.65 HC-\$9.87
DESCRIPTORS Health; *Health Conditions; *Health Facilities;
*Health Needs; Health Programs; *Health Services; Low
Income; *Low Income Groups; Medical Treatment

ABSTRACT

This study on health care and health and illness of low income families is based on findings from interviews with 301 low-income families in the state of Maine. The findings show that a majority of the families have various health or medical problems which need immediate attention. These problems range from dental care and chronic medical conditions to inadequate physical and sanitary conditions. These families lack access to medical services and facilities and show a low utilization of existing services. Many of the families use folk-medicines and remedies for health care. Lack of financial resources is the primary reason reported for lack of accessibility to a doctor. A direct relationship was found between socio-economic status and health and illness behavior patterns. A very high proportion of the families appear to be receptive to proposed services and facilities such as health screening programs and community health centers or clinics. (Author/WS)

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**HEALTH CARE, HEALTH
AND ILLNESS BEHAVIOR OF
LOW INCOME FAMILIES IN THE
STATE OF MAINE**

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CG 007 357

MAINE'S REGIONAL MEDICAL PROGRAM

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**HEALTH CARE, HEALTH
AND ILLNESS BEHAVIOR OF
LOW INCOME FAMILIES IN THE
STATE OF MAINE**

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RESEARCH MONOGRAPH SERIES 1

January, 1971

PREFACE

The study was conducted by Maine's Regional Medical Program Research and Evaluation Service, (Bhopinder S. Bolaria, Ph. D., Director) during August-December 1969 in cooperation with the Merrymeeting Community Action Inc., Bath, Maine. Interviews were conducted with 301 low income families in Richmond, Freeport, Woolwich, Brunswick, Phippsburg, George Town, Harpswell, Bath and Bowdoinham.

Special thanks to Hattie B. Weber, Social Planner, Merrymeeting Community Action, Inc., Bath, Maine, for her supervision during the data collection phase and other help in this study. I would also like to acknowledge the assistance of Mrs. Joyce Gentry, Mrs. Maureen Murphy, and Mrs. Dorothy Pinkham, Miss Nancy Pinkham, Mrs. Barbara Gange, Mrs. Susan Uhle, Mrs. Arlene Trott, Mrs. Jennie Edwards, and Mrs. Paul McCarthy, for conducting the interviews.

Thanks are also due to Pamela Bilodeau, Rosemary Bolaria, Marc Bilodeau, and Kenneth Sinclair for analysis and tabulation of the data.

B. S. B.

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CHAPTER I

INTRODUCTION

Modern development in science and technology has brought about changes within the medical profession and in the patterns of medical service.¹ The structure of medical service, the character of medical practice, the physician's role, the doctor-patient relationships have been changing rapidly. The ways in which physicians serve their patients--the manner and setting--have greatly changed. Medical practice has shifted from home to the office, clinics and hospitals, where the doctor has access to elaborate equipment, specialized services, and other facilities. In order to deliver "total medical care" the physician needs the cooperation of his more specialized colleagues and many other paramedical technical personnel. The physician's relations with his colleagues, access to laboratory, and above all, access to hospitals, play a very important role in his practice. The idea of the isolated practitioner is a reality of the past.² The individual doctors are less able to deliver "total medical care" and are less able to bring to their patients all the specialized knowledge of modern medicine.

Consequently, the delivery of modern health care requires team effort. Yet in the face of all this the medical services in the United States are loosely organized. The National Advisory Commission on Health Manpower concluded:

Medical care in the United States is more a collection of bits and pieces (with overlapping, duplication, great gaps, high costs and wasted effort), than an integrated system in which needs are closely related.³

The Commission further stated:

There is a crisis in American Health Care. The intuition of the average citizen has foundation in fact. He senses the contradiction of increasing employment of health manpower and decreasing personal attention to patients. The crisis, however, is not simply of numbers. It is true that a substantially increased number of health manpower will be needed over time. But if additional personnel are employed in the present manner and within the present patterns and systems of care, they will not avert, or even perhaps alleviate, the crisis. Unless we improve the system through which health care is provided, care will continue to become less satisfactory, even though there are massive increases in cost and in number of health personnel.⁴ (italics in original)

The increasing cost of health care has left many Americans unable to cope with their health and illness problems. While the Consumer Price Index has risen steadily since World War II, medical price increases have far exceeded the other items in the index. In the last two decades the cost of medical services has risen 129 per cent.⁵ Consequently the private consumer expenditures for health and medical care have also increased.

This increase in cost of medical care has affected the poor more severely than any other segment of the population. Almost twice as many people are poor in rural areas of this country as in urban areas.⁷ But the plight of the rural poor is further complicated by the fact that health facilities, costly as they may be, are largely inaccessible to them.⁸ The general tendency has been that the "physicians are distributed not according to medical needs but according to economic opportunity to earn a large income."⁹ Most of the rural areas are under-doctored.¹⁰

The combination of high cost for medical care, inequitable

distribution of health personnel and facilities, a loosely integrated system of health care, has perpetuated ill health particularly among the poor and especially the rural poor. A few selected statistics may be cited to illustrate the health gap between the poor and the non-poor.

1. Among persons with family incomes of less than \$2,000, about 29 per cent have chronic conditions with limitation of activity, as contrasted with less than 7.5 per cent among persons with family incomes of \$7,000 or more. This is partly a reflection of a greater proportion of aged among the poor. However, even in the age 17-44 group, the poor are affected at twice the rate of the non-poor, and in the age 45-64 group, the rate is five and one-half times greater.

2. Persons with family income of less than \$2,000 have more than double the days of restricted activity per year than persons with an income of \$7,000 or more. For males in the working age group 45-64, the lower income group has three and one-half times as many disability days--49.5 in the under \$2,000 income group compared to 14.3 in the over \$7,000 income group.

3. In one year, a larger portion of persons who live in low income families have multiple hospital episodes than those in higher income groups. The length of hospital stay is longer for the poor (10.2 days for the income group under \$2,000 compared to 7.2 days for the income group over \$7,000, a relationship which holds for all but the 15-24 age group), and they are more often hospitalized for non-surgical conditions. This exists in spite of the fact that the poor are much less likely to have hospital insurance to cover the bill.

4. If non-white status is used as a proxy for the poor, the clear health differential, by race, in this country can be interpreted as reflecting the unfavorable health status of the poor. While life expectancy for the new born has increased significantly since the turn of the century for both white and non-white groups, a wide differential still exists (63.6 years for non-white versus 70.9 years for the white population).

5. Maternal mortality rates among non-white mothers are approximately four times those among white mothers (in 1965, 90.2 and 22.4 maternal deaths per 100,000 live births, respectively). In infant mortality, a similar trend exists (21.5 deaths per 1,000 live births among white infants compared to 40.3 among non-white infants).

6. High differentials in non-white versus white mortality are found for tuberculosis, influenza, and pneumonia, vascular lesions affecting the central nervous system and death due to homicide. For each of these, the ratios are greater than 2 to 1. There is also a higher non-white mortality from cancer of the cervix, a neoplasm almost entirely curable with early diagnosis and treatment.

7. Children under age 15 average two physicians visits per year in families with incomes under \$2,000 compared to 4.4 in families with incomes over \$7,000.

8. In families with incomes under \$4,000, 22 per cent have never seen a dentist as compared to 7.2 per cent in families with incomes over \$10,000.

9. 22.5 per cent of non-white children age one to four have no DPT immunization compared to 8.6 per cent of white children.¹¹

The same report also points out the salient reasons for the poor health status of the low income population.

1. The current "system" in which the poor receive health services perpetuates fragmented emergency-oriented medical care which is often relatively inaccessible in terms of time and location.

2. Despite recent legislation, inability to pay for services remains an important barrier to the poor's quest for health care.

3. Medical facilities and health manpower are particularly scarce in areas with a high concentration of poor.

4. Environmental and nutritional deficiencies--lead to lowered host resistance and greater exposure to health hazards.¹²

The personal health needs, health and illness behavior of the low income families is the main concern of this research monograph. However, to define more clearly the health needs and health care of the people in the State of Maine, the following studies were conducted.

Studies in Rural Health Care in Maine: A Brief Summary

This research monograph is based on one of the studies conducted by Maine's Regional Medical Program Research and Evaluation Service. The primary purpose of these studies was to examine the health status, health-care needs, attitudes, utilization patterns, health and illness behavior, and medical services available to the residents of rural communities. The studies are:

(A) "Gouldsboro Health Study"¹³

This study was conducted in fifteen communities located in Hancock and Washington Counties. The four communities in Hancock County are Sullivan, Sorrento, Gouldsboro, and Winter Harbor. The remaining eleven communities located in Washington County are Addison, Beals, Cherryfield, Columbia, Columbia Falls, DeBlois, Harrington, Jonesport, Jonesboro, Milbridge, and Steuben. Interviews were conducted with a one-third systematic random sample of families in these communities. In all, main questionnaires were administered to 1,044 families and there were 178 hospital supplements, 342 major illness supplements, 93 pediatric supplements and 45 pregnancy supplements.

(B) "American Indian Study"¹⁴

This study was conducted in cooperation with the Diocese of Portland, Division of Indian Affairs. The data were collected from 90 families from two Indian Reservations in Washington County by four interviewers.

(C) "Jackman Study"¹⁵

The data for this study were collected from 316 families. This is a "total" community health study.

(D) "Health Study-Low Income Families"¹⁶

This study was conducted in cooperation with Merrymeeting Community Action Inc., Bath, Maine. Interviews were conducted with 301 families.

Present Study

As noted above, these findings are based on one of the studies conducted by Maine's Regional Medical Program Research and Evaluation Service. The present study was conducted in cooperation with the Merrymeeting Community Action Inc., Bath, Maine. Interviews were conducted with 301 low income families in Richmond, Freeport, Woolwich, Brunswick, Phippsburg, George Town, Harpswell, Bath, and Bowdoinham.

Information was provided by the adult member of the family, in most cases wives, who were expected to know most about family use of health services. Therefore, though questions were addressed to one member of the family, health data was obtained regarding all members of these families. In this manner information was collected for 1,038 individuals: 277 wives, 135 husbands, 17 other adults, and 609 children of all ages.

It may be noted here that these families are from one area of Maine and therefore may not be entirely representative of all the low income families in the state. At the same time these families do have certain commonalities with other low income families (eligibility for surplus food) and it may very well be that these findings apply to other low income families in the state.

However, one must also pay attention to the differential distribution of health resources and services, such as, physicians and hospital services, in the state. Distribution of selected medical resources in Maine are presented in Appendix B, Tables B-1 to B-6. The main point is that the utilization of medical services may be a function of both the resources of individual families and the availability of and accessibility to such services.

The Questionnaire

A wide range of data were collected (for Questionnaire see Appendix C).

The general demographic information included: marital status, length of time the family has lived in the present house and town, the total number of persons in the family and their ages, sex and state of health, employment status of both husband and wife, educational level of husband and wife and their religious preference and affiliation.

Information was also collected on the utilization patterns, availability of and accessibility to medical services. Such information included: whether the respondents have a family doctor, distance from the family doctor and the nearest doctor, and difficulties encountered in seeing the doctor, distance from the nearest hospital and utilization patterns of medical services.

Data were collected on the respondents' perceptions of the availability and adequacy of medical services in general and heart, cancer and stroke in particular, and the desirability and actual use of physician's services. In addition information was

collected on physical examinations, x-rays, hospitalization, electrocardiogram, pap test , and breast cancer examinations.

Respondents were asked to indicate their family's utilization of various health services during a specified period, disabilities, current health or medical problems, incidence of various diseases in the family and state of health, and unmet medical needs of these families.

Other information included the dental care, family planning, expected solutions to selected symptoms of children and adults, children's health care, and use of home remedies.

Methodological Note

Data were collected by household interviews and the questions on health-care pertaining to all members of the family were directed to an adult member, primarily the wife, who was expected to know most about family use of health services. In this manner, though interviews were conducted with 301 respondents, a varying degree of information was collected on 1038 individuals. The use of household interviews, by means of which questions on health information pertaining to all members of the household are addressed to one of its members, is most commonly used in nation-wide studies of this nature.

In the present study we are interested in information both for adults and children. The sample breakdown is as follows:

Sample Distribution

		Number	
<u>All Adults</u>	Wives	277	
	Husbands	135	
	Other adults	17	
			Total = 429
<u>All Children</u>	Children 18 years of age & younger	590	
	Other children	19	
			Total = 609

In cases where the wife was the respondent, she provided information on all the other members of the family and in the case where husband was the respondent he provided information on all the other members of the family. The discrepancy in the total number of families interviewed (301) and the number of husbands and wives is due to divorce, desertion, widow (widower) or single respondents. Consequently some of the families interviewed were either female-based or male-based households. Other adults are other immediate relatives living with the family.

Data were collected both on children of all ages and children 18 years of age and younger. Some questions were asked about all the children, in that case the percentage figures are based on 609. Where the question referred to only children 18 years of age and younger, the percentage figures are based on 590. However, in some cases the percentage figures are based on the number of families interviewed, that is 301.

As this sample is composed of a homogeneous population, no attempt is made to do any in-group comparisons. However, findings are related to other studies in this area.

As noted earlier the respondent provided information for self and also for his/her spouse and other family members. In the

presentation of the findings, the data are reported for husbands and wives. In the husband's column, the frequency and percentage figures are obtained by combining the report of the respondent for himself and the female respondent for her husband. In wife's column, the frequency and percentage figures are obtained by combining the report of the respondent for herself and the male respondent for his wife. Our categories of husband and wife also include single males and females.

Socio-Economic Characteristics of the Sample

These findings are based upon interviews conducted with 301 families. The data of various socio-economic characteristics of the sample are presented in Appendix A, Tables A-1 to A-9.

The majority of the families are stable residents of these communities. For instance, 67.1 per cent of the families have been living in those communities for more than 10 years and approximately one-third have been living in the present house for the same time period.

Since the purpose of the study was to ascertain the health-care needs of the families, an attempt was made to interview the person who might be the most knowledgeable. It was assumed that the wife would be such a person and consequently the majority of the interviews were conducted with them. Approximately 83 per cent of the respondents (interviews) are females and over 16 per cent males. The majority of the respondents (approximately 57 per cent) are single, divorced, separated, deserted, or widowed, 36.7 per cent are married and 5.6 per cent single.

Regarding the ages of wives and husbands, approximately one-fifth of both are 65 years of age and older, and 14.4 per cent of the wives and 30.4 per cent of the husbands are 50-64 years old, and only 10.2 per cent of the wives and 4.4 per cent of the husbands are under 25 years of age. These data show that both the male and female heads of the families are in the older age groups.

A little over 15 per cent of the wives and 48.1 per cent of the husbands are employed, and most of them hold low-status and consequently low-paying jobs.

A majority of the husbands and wives have low education. For instance, 39.9 per cent of the wives and 34.1 per cent of the husbands have elementary (grades 1 to 8) education, 42.7 per cent of the wives and 28.1 per cent of the husbands 1-3 years of high school, 14.8 per cent of the wives and 12.6 per cent of the husbands, 4 years of high school. A very few of them have received education beyond the high school level.

A majority of the husbands and wives are Protestants. However, 19.5 per cent of the wives and 31.8 per cent of the husbands have no formal religious affiliation.

In summary, as might be expected, the sample families are headed by persons in the older age group, tend to be unemployed and those who are employed hold low-status and consequently low-paying jobs, and have a low educational level. Though no direct question was asked on income, these families have low enough incomes to be eligible for surplus food.

The data further show that for most of these families the major sources of funds for medical care are from State and Federal

assistance.

Approximately 60 per cent of the families had some form of insurance. Multiple insurance sources were reported. For instance, of those who did have insurance, 40.7 per cent had Blue Cross, 37.9 per cent Blue Shield, and 15.9 per cent--Social Security and Military. However, almost one-half of the families had State aid (AFDC, AD, etc.) to meet their medical expenses, and only 5.5 per cent had private insurance. (Appendix A, Tables A-10, A-11)

The respondents were specifically asked: "How do you meet the expenses for your family's medical care?" Multiple sources of funds are reported. The primary source of funds are Medicare, State help, town help, Federal help and friends and relatives. However, a few of the families also rely upon their savings and other household funds (Appendix A, Table A-12).

Self-Evaluation of Health

The respondents were asked to rate their own health and that of their spouse and children as excellent, good, fair or poor. The data show that 56 per cent of the wives and 41.5 per cent of the husbands received a rating of "excellent" or "good" whereas, 87.4 per cent of the children's health is rated as "excellent" or "good" (Table 1). The health of most of the other adults in the family was rated as "good" or "fair". The respondents appear to be more optimistic about their children's health than their own or their spouse's health. It must be noted that about one-fourth of the husbands are reported in "poor" health.

This particular question has been asked in other studies.

TABLE 1

RESPONDENTS' SELF-EVALUATION OF HEALTH, AND RATING OF
HEALTH OF SPOUSE AND CHILDREN (IN PER CENT)

Health Rating	Wife N=277	Husband N=135	Children N=609
Excellent	15.9	10.4	35.5
Good	40.1	31.1	51.9
Fair	28.2	27.4	4.6
Poor	12.3	26.7	2.6
No information	3.5	4.4	5.4

TABLE 2

REGULAR SOURCE OF MEDICAL CARE BY ADULTS AND CHILDREN

Source	Wife		Husband		Children	
	F	%	F	%	F	%
Have regular source of care	219	79.0	98	72.5	445	73.0
No regular source of care	53	19.0	30	22.7	108	17.7
No information	5	2.0	7	4.8	56	9.3
Total	277	100.0	135	100.0	609	100.0

TABLE 3

SOURCES OF REGULAR CARE BY TYPE OF SOURCES, ADULTS AND CHILDREN

Sources of Care	Wife		Husband		Children	
	F	%	F	%	F	%
Physician	203	92.7	89	90.8	405	91.0
Hospital	2	0.9	6	6.2	11	2.4
Clinic	8	3.7	2	2.0	17	3.8
Medical Person (not specified)	4	1.8	-	---	6	1.4
No information	2	0.9	1	1.0	6	1.4
Total	219	100.0	98	100.0	445	100.0

A 1955 nationwide study of adults showed 30 per cent "good" 25 per cent "fair" and seven per cent "poor".¹⁷ In another study in 1959 (excluding older people), it was found that 31 per cent rated their health as "excellent," 45 per cent "good," 20 per cent "fair," and four per cent "poor."¹⁸ In another study nine per cent of the respondents rated their health as "excellent," 29 per cent "good," 38 per cent "fair," and 24 per cent "poor."¹⁹ In the same study 64 per cent rated their children's health as "excellent" or "good". In the 1955 study 92 per cent of the respondents rated their children's health as "excellent" or "good".

Patterns and Sources of Medical Care

In this study we also attempted to determine the patterns and sources of care for the sample population. Such information may be important in determining the use of health services by the sample families.

The respondents were asked: "Is there a particular medical person or clinic you or your family members go to when you are sick or when you want advice about health?" Information was collected concerning all the members in the family. Our data show that 79 per cent of the wives, 72.5 per cent of the husbands and 73 per cent of the children had some regular source of care (Table 2).

The data by type of source were collected for those who had a regular source of care. These data are presented in Table 3. It is apparent that a physician (primarily a GP rather than a specialist) is the primary source for adults as well as for children. Hospital, clinic, and "other medical person" are reported in a few

cases as sources of regular care.

In a nationwide study, 87 per cent of the sample indicated that they had some regular source of care.²⁰ The study shows considerable differences in sources of care by family income. Low income families are less likely to have a regular source of care, and are more likely to use clinics and general practitioners, whereas "thirty-eight per cent of those with high family incomes use specialists as their regular source of care. This proportion is nine percentage points greater than that for middle income people and almost twice as large as the proportion of low income people who use specialists as their regular practitioners,"²¹

When we consider our total sample (wives, husbands and all children), approximately three-fourths of them had some regular source of care, as compared to 87 per cent of the general population. Our findings are consistent with other studies, that is, that the low income families are less likely than high income families to use a specialist's services. According to a U.S. Department of Health, Education and Welfare publication, "among the civilian, noninstitutional population of the United States, a greater percentage of persons in high income families consulted selected types of medical specialists and practitioners during the year ending 1964 than did persons in low income families."²² The data further show that "for each selected type of specialist, family income had a direct relationship to the percentage of persons consulting that particular specialist."²³

The data presented above indicate in general whether the sample families use a particular medical person or clinic for advice

about health and illness. Additional data were collected to explore the general utilization patterns of physician services, precipitating factors in contacting a physician, first action taken when medical attention is needed, and sources of health care for children when sick or hurt. These data provide us information concerning the immediate reaction to sickness by the sample families.

Those families who had children 18 years of age and younger (183 families) were asked: "Where do you take your children when they are sick or hurt?" As Table 4 shows the physician is the primary source of care. Approximately 93 per cent of the families reported that they take their children to a doctor's office when the children are sick or hurt.

Responses or reactions to sickness may be varied. The initial reaction to illness may involve use of home remedies, consultation with neighbors, friends, relatives, advice from others before consulting a physician. The lay consultation may precede the professional consultation.²⁴ Suchman found that a high percentage of his respondents had discussed their symptoms with other persons, usually a relative, before seeking medical care.²⁵ In the present study we asked the respondents: "What do you do first when you need medical attention?" The data reported in Table 5 show that the first action usually taken by the respondents was to call a doctor or go to a doctor. Approximately 91 per cent indicated that they call a doctor or go to a doctor when they need medical attention, 3.3 per cent go to a hospital and another 1.7 per cent to a clinic. Only two per cent reported that they would consult a friend or neighbor and one per cent indicated that they would go to a drugstore.

TABLE 4
SOURCES OF HEALTH CARE FOR CHILDREN WHEN SICK OR HURT BY FAMILIES
N = 183

Health Care Sources	Frequency	Per cent
Doctor's office	171	93.4
Hospital	7	3.8
Nurse	--	---
Other	3	1.6
No information	2	1.2
Total	183 ^a	100.0

^aOne hundred and eighteen families did not have children who were presently 18 years of age or younger.

TABLE 5
FIRST ACTION TAKEN WHEN MEDICAL ATTENTION IS NEEDED
N = 301

Action Taken	Frequency	Per cent
Call a doctor or go to a doctor	274	91.1
Go to hospital	10	3.3
Go to clinic	5	1.7
Go to drugstore	3	1.0
Call a nurse	-	---
Consult a friend or neighbor	6	2.0
Other ^a	3	1.0
Total	301	100.0

^aIncludes such items as: home remedies, and wait and see if it goes away by itself.

These data show that the respondents' first reaction is in the form of professional consultation rather than lay-consultation.

Many factors may influence one's decision to consult a physician.²⁶ Being "sick" in itself may not be a sufficient reason to make contact with a physician. Our data show (Table 6) that "pain" was the most frequently mentioned factor in initiating contact with a doctor. Other relatively frequently mentioned symptoms and/or conditions were: "have fever" and "when first feel poorly (health)." Other less frequently mentioned factors were: "when money is available to pay doctor," "when someone tells (you) that you should," "when cannot handle the situation," and "when need to."

In terms of general utilization patterns of physician services, the data do not show any regular patterns. In this case we are not dealing with the particular factors which might influence one's decision or "push" someone to seek care, but rather with general use of physician's services. Three-fourths of the sample do not indicate any regular pattern of visits to a doctor, that is, they see a doctor "only when sick" (Table 7).

Attitudes Toward Health Care

One of the factors which might influence a person's decision to seek care is his attitudes toward personal health and medical care. Some writers relate the use of health services to the knowledge, attitudes, particular socio-medical orientations and other factors.²⁷ The lower classes seem to be more skeptical of the value of routine preventive care, early consultation and treatment, and these attitudes subsequently may interfere with the receipt

TABLE 6
FACTORS INITIATING CONTACT WITH A PHYSICIAN BY FAMILIES

Symptom and Conditions	Frequency	Per cent	N
Have pain	165	54.5	301
Have fever	108	35.9	301
When money is available to pay doctor	21	7.0	301
When first feel poorly (health)	129	42.9	301
When someone tells (you) that you should	13	4.3	301
Other reasons ^a	25	8.3	301

^aIncludes such items as: "when cannot handle the situation" and "when need to."

TABLE 7
GENERAL UTILIZATION PATTERNS OF PHYSICIAN SERVICES BY FAMILIES
N = 301

Conditions	Frequency	Per cent
Only when sick	226	75.1
At least once a year	30	10.0
At least twice a year	11	3.7
Three or more times a year	25	8.2
Other ^a	9	3.0
Total	301	100.0

^aIncludes such items as: "children have regular checkups," "parents only when ill," "only when have to go."

of medical care in time.²⁸

In this study an attempt was made to ascertain the attitudes of the respondents toward routine visits to a physician, routine visits to a dentist, and the desirability of regular health checkups for adults and children.

Regarding general routine visits to a physician, our data show (Table 8) that a very high proportion of the respondents recognize the desirability of routine visits to a physician. For instance a little over 50 per cent endorse the statement that one should see a physician "at least once a year for a physical examination," 31.6 per cent "at least twice a year," and 7.6 per cent "three or more times a year." Only about 10 per cent endorse the statement that one should see a physician "only when sick" (symptomatic care).

An even higher proportion of the respondents recognize the desirability of preventive dental care. Almost 93 per cent of the respondents (Table 9) indicate that a person should see a dentist one or more times a year.

To ascertain further the attitudes of the respondents toward health care they were asked: "Do you feel that regular health care checkups are important?" The data reported in Table 10 show that approximately 96 per cent of the sample responded in the affirmative to this question.

Concerning children's dental care, over 90 per cent of the respondents (Table 11) indicate that children should see a dentist one or more times a year.²⁹

The data presented here show that the low-income families

TABLE 8
RESPONDENTS' ATTITUDES TOWARD ROUTINE VISITS TO A PHYSICIAN
N = 301

How often do you think one should see a doctor?	Frequency	Per cent
Only when sick (symptomatic care)	31	10.3
At least once a year for a physical examination	152	50.3
At least twice a year	95	31.6
Three or more times a year	23	7.6
Total	301	100.0

TABLE 9
RESPONDENTS' ATTITUDES TOWARD ROUTINE VISITS TO A DENTIST
N = 301

How often do you think a person should see a dentist?	Frequency	Per cent
Only when absolutely necessary (symptomatic care)	21	7.0
Once a year	73	24.3
Twice a year	188	62.4
Three or more times a year	18	6.0
No information	1	0.3
Total	301	100.0

TABLE 10
RESPONDENTS' ATTITUDES TOWARD REGULAR HEALTH CHECKUPS
N = 301

Do you feel that regular Health Checkups are important?	Frequency	Per cent
Yes	290	96.3
No	11	3.7
Total	301	100.0

TABLE 11
RESPONDENTS' ATTITUDES TOWARD ROUTINE VISITS TO A DENTIST BY CHILDREN
N = 173

How often do you think children should see a dentist?	Frequency	Per cent
Once a year	28	16.2
Twice a year	122	70.5
Three or more times a year	12	6.9
Only when absolutely necessary (symptomatic care)	9	5.2
No information	2	1.2
Total	173 ^a	100.0

^aOne hundred and eighteen families did not have any children 18 years of age or younger and 10 families indicated that their children were too young to see a dentist.

in our sample generally express "positive" attitudes toward routine visits to a physician, health checkups and dental care. Though further discussion on attitudes and actual behavior is presented later, it may be noted here that one's "positive" attitudes toward health and health-care may not be reflected in one's actual health behavior, that is, the actual use of health-care services.³⁰ Other factors such as monetary cost and availability of and accessibility to services may be important considerations in the utilization of medical care. Our own findings presented later show that these families have a rather low utilization of services primarily due to financial considerations and non-availability of and inaccessibility to various medical facilities.

Perception of Services

In this study we were also interested in the respondent's perception of the "availability" and "adequacy" of medical services in the area. Our data show (Table 12) that 44.9 per cent of the respondents consider that the medical services are "available and adequate." Approximately eight per cent of the respondents perceive that "medical services and facilities are not available," 33.2 per cent "available but not adequate," 2.3 per cent "exist in the community but not available to my family," 8.3 per cent "available for minor illnesses only," and 2.7 per cent "available only for emergencies."

However, when the question was asked concerning services and facilities for particular ailments, even a smaller percentage of respondents perceive that the services are "available and

TABLE 12
RESPONDENTS' PERCEPTION OF THE AVAILABILITY AND ADEQUACY
OF MEDICAL SERVICES

N = 301

Perception of the Availability and Adequacy of Services	Frequency	Per cent
Do not exist (services and facilities not available)	25	8.3
Available but not adequate	100	33.2
Exists in community--but not available to respondents' family	7	2.3
Available for minor illnesses only	25	8.3
Available only for emergencies	8	2.7
Available and adequate	135	44.9
No information	1	0.3
Total	301	100.0

TABLE 13
RESPONDENTS' PERCEPTION OF THE AVAILABILITY AND ADEQUACY OF MEDICAL
SERVICES FOR STROKE, CANCER, HEART DISEASE AND HEART ATTACK

Ailments	Those Reporting Available and Adequate					
	Available			Adequate		
	F	%	N	F	%	N
Stroke	98	32.6	301	83	27.6	301
Cancer	80	26.6	301	68	22.6	301
Heart disease	93	30.9	301	80	26.6	301
Heart attack	100	33.2	301	85	28.2	301

adequate." The data reported in Table 13 indicate 32.6 per cent, 26.6 per cent, 30.9 per cent, 33.2 per cent perceive that the medical services are "available" for stroke, cancer, heart disease and heart attack respectively. An even smaller proportion of the respondents perceive that the services are "adequate" for these ailments. For instance, 27.6 per cent, 26.6 per cent, 28.2 per cent indicate that medical services are "adequate" for stroke, cancer, heart disease, and heart attack respectively.

It would be interesting to relate the respondents' perception of services to the objective state of affairs, that is, the actual amount of medical services and facilities in that area. Other areas of investigation might include: the relationship between perception and actual use of services and relationship of perceptions to various socio-economic characteristics of the sample.

Summary

The personal health needs, health and illness behavior of low-income families is the main concern of this research monograph. Data were collected by household interview and the questions on health-care pertaining to all members of the family were directed to an adult member. In this manner, though interviews were conducted with 301 respondents, a varying degree of information was collected on 1,038 individuals.

As might be expected the sample families are headed by persons in the older age group, tend to be unemployed and those who are employed hold low status and consequently low-paying jobs, and have a low educational level. For most of these families the major sources of funds for medical care are from State and Federal agencies.

Regarding self-evaluation of health, the respondents appear to be more optimistic about their children's health than

their own or their spouse's health. About one-fourth of the husbands and approximately 12 per cent of the wives are reported in "poor" health.

Approximately three-fourths of our sample population have some regular source of care. A general practitioner rather than a specialist is the primary source of care for adults as well as for children. Hospital and clinic are reported in a few cases as sources of care.

In terms of general utilization pattern of services, three-fourths of the sample do not indicate any regular pattern of visits to a physician, that is, they see the doctor "only when sick."

Regarding attitudes toward health and health care, a very high proportion of the respondents recognize the importance and desirability of routine-preventive visits to a physician, preventive dental care, and health checkups. However, their "positive" attitudes toward health and health-care are not reflected in their actual health behavior, that is, the actual utilization of health services and facilities. Our data presented later show that these families have a rather low utilization of services primarily due to financial considerations and non-availability of and inaccessibility to various medical services.

Approximately 45 per cent of the respondents perceive that the medical services are "available and adequate" in this area. Approximately one-third or less of the respondents perceive that the medical services are "available" for stroke, cancer, heart disease, and heart attack and even a smaller proportion of them perceive that the services are "adequate" for these ailments. It would be inter-

esting to relate respondents' perception of services to the actual amount of medical services and facilities in that area, their actual use of services and to their socio-economic characteristics.

FOOTNOTES CHAPTER I

¹Milton Roemer, "Changing Patterns of Health Service: Their Dependence on a Changing World," The Annals of the American Academy of Political and Social Service, Vol. 346 (March 1963); Herman M. Somers and Anne Somers, Doctors, Patients and Health Insurance (Washington, D. C.; The Brookings Institute, 1961) p. 27; Iago Galdston Medicine in Transition (Chicago, Illinois, The University of Chicago Press, 1965) pp. 15-16; Marvin K. Opler, "The Industrial Societies and The Changing Role of Doctors," Journal of Occupational Medicine, IV (May 1962) 237-241; See also Richard M. Titmuss, Essays of the Welfare State (London, Allen and Unwin Ltd., 1960) pp. 178-202

²Somers & Somers, op. cit., p. 37; Talcott Parsons "Social Change and Medical Organization in the United States: A Sociological Perspective," The Annals, op. cit., pp. 21-33; Roemer, op. cit., pp. 44-56; M. W. Susser and W. Watson, Sociology in Medicine (London: Oxford University Press, 1962) pp. 151-187.

³Report of the National Advisory Commission of Health Manpower, Volume 1, November, 1967, (Washington, D.C., Government Printing Office) p. 3.

⁴op. cit., p. 2.

⁵Costs and Delivery of Health Services to Older Americans, Hearing before the Subcommittee of Health of the Elderly of the United States Senate, Part I, 1967, p. 335 (see Table).

⁶See Statistical Abstracts of the United States, 1968, p. 64 (Table).

⁷Rural Poverty, Conference Proceedings of the National Association for Community Development, January 30-February 1, 1967, (Washington, D.C., National Association for Community Development, April, 1967) p. 1.

⁸Report of the National Advisory Commission on Health Manpower, op. cit., p. 37; The Size and Shape of the Medical Care Dollar, U.S. Department of Health, Education and Welfare, Social Security Administration, (Washington D.C.; Government Printing Office, 1970); Volume of Physician Visits: United States July 1966-June 1967, Vital and Health Statistics, Series 10, No. 49 November 1968; J. N. Haug, G. A. Roback, Distribution of Physicians, Hospitals and Hospital Beds in the U.S. 1967, (Department of Survey Research, American Medical Association, Chicago, 1968)

⁹W. G. Rimlinger and H. B. Steele, "Economic Interpretation of the Spatial Distribution of Physicians in the United States," Southern Economic Journal, XXX (July, 1963), pp. 1-12.

¹⁰ Martin Krakowski, Availability and Use of Health Services: Rural-Urban Comparisons, U.S. Department of Agriculture, Economic Research Service, Agricultural Economic Report No. 139, 1968, "The greater metropolitan centers have nearly four times as many physicians per 100,000 people as the isolated rural areas. Furthermore, these small town physicians are older, less well trained, and work longer hours; nearly one-third of the physicians in rural areas are semi-active physicians over 65 years of age, contrasted with 12 per cent of the urban physicians," "Health and Medical Care," in Sociology of Social Problems, eds. Paul B. Horton and Gerald R. Leslie, (New York: Appleton Century Crofts, 1965) pp. 584-629, p. 589.

¹¹ U.S. Department of Health, Education and Welfare, "Delivery of Health Services for the Poor," (Washington D.C.: Government Printing Office, 1967) pp. 3-4.

¹² Ibid., p.4.

¹³ For preliminary findings see: Availability, Accessibility and Utilization of Selected Medical Services: A Study of Fifteen Rural Communities, A publication of Maine's Regional Medical Program Research and Evaluation Service, January 1970, and Supplement to January, 1970 Report, June 1970. Also Major Illnesses, Hospitalization, Maternal and Pediatric Care: A Study of Fifteen Rural Communities, June, 1970.

¹⁴ For preliminary findings see: Availability, Accessibility and Utilization of Selected Medical Services: A Study of American Indians in Maine. A publication of Maine's Regional Medical Program Research and Evaluation Service, September, 1969.

¹⁵ For preliminary findings see: Availability, Accessibility and Utilization of Selected Medical Services: A Study of a Rural Community in Maine, A publication of Maine's Regional Medical Program Research and Evaluation Service, February, 1970, and supplement to February 1970 Report, March, 1970.

¹⁶ For preliminary findings see: Availability, Accessibility and Utilization of Selected Medical Services: A Study of Low Income Families, A publication of Maine's Regional Medical Program Research and Evaluation Service, February, 1970, and supplement to February, 1970 Report, June 1970.

¹⁷ Survey 367, National Opinion Research Center (NORC) conducted for the Health Information Foundation. (From Goodrich et al., See Footnote 19).

¹⁸ U.S. Department of Health, Education and Welfare "Attitudes Toward Cooperation in a Health Examination," Health Statistics, Washington D.C., Series D-No. 6, July 1961 (From Goodrich et al., See Footnote 19).

¹⁹ Charles H. Goodrich, et al., Welfare Medical Care: An Experiment (Cambridge, Massachusetts, Harvard University Press, 1970).

²⁰Ronald Andersen and Odin W. Anderson, A Decade of Health Services (Chicago: The University of Chicago Press, 1967) p. 14.

²¹Ibid., p. 15.

²²U.S. Department of Health, Education and Welfare, "Characteristics of Patients of Selected Types of Medical Specialists and Practitioners United States-July 1963-June 1964," National Center for Health Statistics, Series 10, Number 28, 1966. p. 1 See also literature reviewed in Chapter II.

²³Ibid.

²⁴Eliot Freidson, "Client Control and Medical Practice," American Journal of Sociology, 65 (January, 1960) pp. 374-382.

²⁵Edward Suchman, Stages of Illness and Medical Care," Journal of Health and Human Behavior, 6 (Fall 1965) pp. 128-144.

²⁶See for example, David Mechanic and Edmund Volkart, "Stress, Illness Behavior and the Sick Role," American Sociological Review, Volume 26 (February 1961) pp. 51-59; Dorrian Apple Sweetser, "How Laymen Define Illness," Journal of Health and Human Behavior, Vol. 1 (Spring 1960) pp. 219-225; Charles Kadushin, "Individual Decisions to Undertake Psychotherapy," Administrative Service Quarterly, Volume 3, (December 1958), pp. 379-411; Ervin L. Linn, "Agents, Timing, and Events Leading to Mental Hospitalization," Human Organization, Volume 20 (Summer, 1961) pp. 92-98; Eliot Freidson, Patient's View of Medical Practice (New York: Russell Sage Foundation) 1961.

²⁷See for example: Daniel Rosenblatt and Edward A. Suchman, "The Underutilization of Medical-Care Services by Blue-Collarites," in Arthur B. Shostak, William Gomberg, (eds.), Blue-Collar World, Prentice Hall, 1964, pp. 341-349; J. A. Ross, "Social Class and Medical Care," Journal of Health and Human Behavior, 3 (Spring 1962); Saxon Graham, "Socioeconomic Status, Illness and the use of Medical Services," Milbank Memorial Fund Quarterly, 35 (January 1957) pp. 58-66; Irving K. Zola, "Illness Behavior of the Working Class: Implications and Recommendations," in Arthur B. Shostak and William Gomberg, Blue-Collar World, Prentice Hall, 1964, pp. 350-361; S. Lowry. et al., "Factors Associated with the Acceptance of Health Care Practices Among Rural Families," Rural Sociology, 23 (June 1958) pp. 198-202; E. A. Suchman, "Sociomedical Variations Among Ethnic Groups," American Journal of Sociology, 70, 1964, pp. 319-331; E. A. Suchman, "Social Patterns of Illness and Medical Care," Journal of Health and Human Behavior, 6, 1965, pp. 2-16; D. Phillips, "Self-Reliance and the Inclination to Adopt the Sick Role," Social Forces, 43, 1965, pp. 555-563; F. MacGregor, "Social Determinants of Health Practices," American Journal of Public Health, 51 (November 1961) pp. 1709-1714; Lyle Saunders, Cultural Differences and Medical Care (New York: Russell Sage Foundation) 1954. For other studies see Chapter II.

²⁸Earl L. Koos, The Health of Regionville (New York: Columbia University Press) 1954.

²⁹One must note the difference between the other questions on attitudes and this particular question on children's dental care. The other questions are stated in more general impersonal terms, i.e., "How often one should or how often should a person," whereas this question was worded as "How often do you think your children should see a dentist." Therefore the respondents answered the question in terms of their own children, that is why some respondents did not answer the question and stated that their children are too young to see a dentist. If this is the case, then this question reflects the dental care "needs" of children and is less an indicator of their attitudes.

³⁰See also, Edward Hassinger and Robert L. McNamara, "Stated Opinion and Actual Practice in Health Behavior in a Rural Area," Midwest Sociologist, 19 (May 1957); Suzanne M. Selig and Bhopinder S. Bolaria, Attitudinal and Social Correlates of Health and Sickness Behavior of American Indians in the State of Maine, A publication of Maine's Regional Medical Program Research and Evaluation Service, August, 1970.

CHAPTER II

HEALTH AND ILLNESS BEHAVIOR

The study of "medical behavior" has produced a large body of theoretical and empirical literature. Much of this literature concerns the study of differential attitudes toward health and illness, differential health practices, variability of reactions to symptoms and illness, and variability in the use of health services.

The purpose of this chapter is to discuss relevant theoretical orientations and empirical literature pertaining to health and illness behavior.¹

Theoretical considerations

Kasl and Cobb provide a classification of various behaviors in this area, namely, health behavior, illness behavior and sick-role behavior.

Health behavior is any activity undertaken by a person believing himself to be healthy, for the purpose of preventing disease or detecting it in an asymptomatic stage.

Illness behavior is any activity undertaken by a person who feels ill, to define the state of his health and to discover a suitable remedy. The principal activities here are complaining and seeking consultation from relatives, friends, and those trained in matters of health.

Sick role behavior is activity undertaken by those who consider themselves ill, for the purpose of getting well. It includes receiving treatment from appropriate therapists, generally involves a whole range of dependent behaviors, and leads to some degree of neglect of one's usual duties.²

According to Kasl and Cobb, the likelihood of one's engaging in a particular behavior is a function of "the perceived amount of threat and the attractiveness or value of the behavior."³ According to the authors, the amount of threat depends on at least the following variables:

(1)The importance of health matters to the individual (2)the perceived susceptibility to the disease in question, and (3)the perceived seriousness of the consequences of the disease.⁴

And the attractiveness or value of the actions depends on:

(1)The perceived probability that the action will lead to the desired preventive or ameliorative results, and (2)the unpleasantness or 'cost' of taking the action compared with taking no action and suffering the consequences.⁵

In summary Kasl and Cobb note:

It appears that most of the variance in regard to health behavior is accounted for by the interaction of perceived threat of disease and perceived value of preventive action. Since both of these perceptions seem to be influenced by education, occupation and income, it is not surprising that social class often appears significant. With regard to symptoms and illness behavior, it is clear that the most important additional variable is psychological distress, especially depression. . . . Finally, the sequence from disease to sick role behavior is probably further influenced by the individual's motivation to get well and by the demands of the sick-role norms, which in turn are affected by certain personality and situational characteristics.⁶

It is apparent from the above discussion that the individual's perception of threat of disease and the attractiveness of preventive action play an important role in the individual's health behavior. However, social class is apparently an important variable in influencing these perceptions. Concerning illness behavior, the additional variable is psychological distress, and sick-role behavior is further influenced by one's motivation to get well and by the

demands of the sick role norms.

King also emphasizes the importance of perception of illness in any health related action, the way one "sees or perceives the situation of disease and all of the social ramifications that accompany it."⁷ Mechanic's concept of illness behavior has a similar basis, and is concerned with "the ways in which given symptoms may be differentially perceived, evaluated and acted (or not acted) upon by different kinds of persons."⁸

Rosenstock also suggests that preventive health behavior is determined by one's perception of the seriousness of and susceptibility to the problem, perceived benefits of taking action and barriers to taking action and cues to action.⁹ Rosenstock's health behavior model is based on individual motivation and beliefs and includes two classes of variables: individuals' readiness (psychological) to act and the belief that a particular course of action would be beneficial on the whole, in reducing the threat of illness.¹⁰ Rosenstock states that an individual's decision to participate in preventive health behavior will not be made unless the following conditions are satisfied.

1. The individual is psychologically ready to take action relative to a particular health condition. The extent of readiness to act is defined by whether the individual feels susceptible to the conditions in question and the extent to which its possible occurrence is viewed as having serious personal consequences.
2. The individual believes that the prevention or test in question is both feasible and appropriate for him to use, would reduce either his perceived susceptibility to or the perceived severity of the health conditions, and no serious psychological barriers to the proposed action are present.
3. A cue or stimulus occurs to trigger the response.¹¹

Zola, approaching the problem from a somewhat different perspective, presents a sequential model consisting of "five triggers" in an individual's decision to seek medical care.¹² These are:

(1) interpersonal crisis (whereby attention is called to the symptom); (2) social interference (the symptom threatens the individual's social activity); (3) the presence of sanctioning (others telling him to seek help); (4) perceived threat of the symptom (cognitive response); and (5) the nature and quality of the symptom (involves similarity of symptoms to previous ones or those of his friends and relatives in order to decide whether to seek help).¹³ Zola also reports that these triggers are viewed differently in importance by various social strata and ethnic groups. Among the Italians the predominant pattern was "interpersonal crisis" and "social interference", "sanctioning" was the predominant Irish pattern, and "nature and quality of their symptoms" was most often used by Anglo-Saxons.

Suchman presents stages of illness and medical care, discerning five stages "demarkating critical transition and decision making points in medical care and behavior."¹⁴ These stages are symptom experience, sick-role, medical-care contact, dependent-patient role and rehabilitation.

Parson's conception of the sick-role implies that one's illness needs to be legitimized by others, which includes the medical profession, one's intimates or people who have influence over him.¹⁵ When illness is legitimized the person assumes a sick-role, which supercedes one's other role obligations. This new role includes new rights and obligations. The sick-role permits him to break other

commitments in order to seek medical care without fear of reprisal and the right "to be taken care of." At the same time it imposes specific norms both on the individual and other people near to him, such as his family. He has the obligation to "want to get well" and to follow "doctor's orders."

Andersen's "behavioral model of families' use of health services" is composed of predisposition, ability and need components.¹⁶ The model suggests that a sequence of conditions contribute to the volume of health services used. Use of services is dependent on: (1) the predisposition of the family to use health services; (2) their ability to secure services; and (3) their need for such services."¹⁷ Elaborating on this model, Andersen discusses the "predisposing" component:

The family composition, the social structure and health beliefs make up the predisposing component. Family composition includes age, sex and family size; the social structure reflects the location of a family in society measured by characteristics of the family's main earner, such as employment, social class, occupation, education, race and ethnicity.¹⁸

The third element in the "predisposing" component is health beliefs, which include "beliefs about medical care, physicians and disease." As he states:

What a family thinks about health may ultimately influence health and illness behavior. For example families who strongly believe in the efficacy of the treatment of their doctors might seek a physician sooner and use more services than families with less faith in the results of the treatment.¹⁹

The "ability" component includes both family resources (family income) and community resources. The "need" component includes both measures of actual illness and families' perception of illness.²⁰

Feldstein, in his analysis of community expenditures and utilization patterns, includes both socio-demographic and economic factors.

Expenditure on medical care is related to both a series of socio-demographic factors reflecting different utilization patterns and probabilities of illness and to a set of economic variables reflecting the ability of persons, given certain socio-demographic characteristics, to purchase medical care.²¹

Other writers have emphasized the role of cultural, ethnic, and social class differences in health and illness behavior. These writers primarily view the health and illness behavior as a socially learned response. Thus Koos observed that "the health attitudes and behavior of a family are related to its position in the social class hierarchy of the community, and are significantly affected by the prescriptions and proscriptions regarding health shared by those who are members of the same social class."²² Koos underlines the variation of health related activities from one social stratum to another based on differential perception of health and illness. For instance, upper-class were more likely than lower-class persons to view themselves as ill when they had particular symptoms and were more likely to seek medical advice. In brief, Koos emphasized two factors: (1) social-class differences in opinions, attitudes and behavior; and (2) perceptions of illness and health which are dictated by culture and environment. These factors operate concurrently and in an integrated fashion, and are vital to what one regards as necessary for health.²³ These factors also influence what the individual "will or will not, can or cannot, expect or accept from those who make his health their professional concern."²⁴

Saunders notes the differences between Spanish-speaking Americans and Anglos in their attitudes and responses to illness and their use of health facilities.²⁵ The Anglos preferred modern medicine for many illnesses and the Spanish-speaking people were more likely to use home remedies or folk medicine and family care. Similar observations have been made concerning other groups in various cultural contexts.²⁶⁻³⁵

The role of cultural and ethnic differences in illness behavior is described by Zborowski in his study of Jewish, Italian, Irish and "old Americans."³⁶ Both the Jewish and the Italian patients respond emotionally to pain and tend to exaggerate the pain experience, Irish tend to deny pain and "old Americans" tend to be stoical and "objective." Zborowski views these behavioral differences in the light of the familial response to children's health and illness among the Jewish and Italian families. He reports that:

Crying in complaint is responded to by parents with sympathy, concern and help. By their over-protective and worried attitude they foster complaining and tears. The child learns to pay attention to each painful experience and to look for help and sympathy which are readily given to him. In Jewish families, where not only a slight sensation of pain but also each deviation from the child's normal behavior is looked upon as a sign of illness, the child is prone to acquire anxieties with regard to the meaning and significance of these manifestations.³⁷

Ethnic differences in illness behavior have been described in a variety of other studies.³⁸⁻⁴¹ These studies show a considerable variation in illness behavior by ethnicity.

The response to illness may also take the form of self-help or self-medication and consultation with relatives, friends and neighbors.⁴²⁻⁴⁴ Also some writers relate the delay in seeking medical-

help to particular medical orientations and socio-economic factors.⁴⁵⁻⁵⁰

Based upon the above studies, it seems fair to state that social class, cultural values, ethnicity and medical orientations play an important part in differential patterns of health and illness behavior.

Mechanic points out that illness behavior may be seen "...as part of a larger coping process—one in which illness behavior may be seen as part of a coping repertory, as an attempt to make an unstable, challenging situation more manageable for the person who is encountering difficulty."⁵¹ He also notes that "if we are to make progress in the study of illness behavior, it becomes necessary to move beyond gross cultural and social differences in illness behavior patterns toward the development of the social-psychological model, which gives a clear perception of the processes involved when someone seeks help."⁵² According to him the factors which affect the individual's response to illness are:

1. Visibility, recognizability, or perceptual salience of deviant signs and symptoms.
2. The extent to which the symptoms are perceived as serious (that is, the person's estimate of the present and future probabilities of danger.)
3. The extent to which symptoms disrupt family, work, and other social activities.
4. The frequency of the appearance of the deviant signs or symptoms, their persistence or their frequency of recurrence.
5. The tolerance threshold of those who are exposed to and evaluate the deviant signs and symptoms.
6. Available information, knowledge, and cultural assumptions and understanding of the evaluator.

7. Basic needs which lead to artistic psychological processes (i.e., Perceptual processes that distort reality.)
8. Needs competing with illness responses.
9. Competing possible interpretations that can be assigned to the symptoms once they are recognized.
10. Availability of treatment resources, physical proximity, and psychological and monetary costs of taking action (included are not only physical distance and costs of time, money and effort, but also costs as stigma, social distance, feelings of humiliation, and the like.)⁵³

In summary, according to Kasl and Cobb, the individual's perception of threat of disease and the attractiveness of preventive action play an important role in his health behavior. These perceptions to a great extent are influenced by one's social class background. Concerning illness behavior, the additional variable is psychological distress, and sick-role behavior is further influenced by one's motivation to get well and by the demands of the sick-role norms. King also emphasizes the importance of perception of illness in any health related action, the way one "sees or perceives the situation of disease and all of the social ramifications that accompany it." Mechanic's concept of illness behavior has a similar basis, and is concerned with the "ways in which given symptoms may be differentially perceived, evaluated and acted (or not acted) upon by different kinds of persons." Rosenstock also suggests that preventive health behavior is determined by one's perception of the seriousness of and susceptibility to the problem, perceived benefits of taking action and barriers to taking action and cues to action. He takes into account one's readiness (psychologically) to act and the belief that a particular course of action would be beneficial on

the whole, in reducing the threat of illness. Zola, approaching the problem from a somewhat different perspective, presents a model consisting of "five triggers" in an individual's decision to seek medical care. These are: interpersonal crises, social interference, the presence of sanctioning, perceived threat of the symptom and the nature and quality of the symptom. Zola reports that these triggers are viewed differently in importance by various social strata and ethnic groups. Suchman presents stages of illness and medical care discerning five stages "demarcating critical transition and decision making points in medical care and behavior." These stages are symptom experience, sick-role, medical-care contact, dependent patient role, and rehabilitation. Parson's conception of the sick-role implies that one's illness needs to be legitimized by others, which includes the medical profession, one's intimates or people who have influence over him. Andersen's "behavioral model of families' use of health services" is composed of predisposition, ability and need components. Use of services is dependent upon these components. Koos, Saunders, and Zborowski, among others, emphasize the role of cultural, ethnic and social class difference in health and illness behavior. Response to illness may also take the form of self-help and medication and consultation with "lay" persons. Others relate the delay in seeking medical help to the particular socio-medical orientations of various groups. Mechanic presents an elaborate list of factors affecting the individual's response to illness, which includes both socio-psychological and socio-economic factors.

Review of Relevant Literature

The purpose of this section is to present studies dealing directly or indirectly with "medical behavior" of the populace. A review of the literature will show that there is considerable variability and range of responses to symptoms, considerable variation in health behavior, illness behavior, and the utilization of medical services. Our emphasis is primarily on the use of physician's services, routine preventive care, hospital services, maternal care, dental care, and the delay in the utilization of various health services.

Most of the data available in this field show that health services utilization is directly related to socio-economic status. The lower socio-economic groups are less likely to utilize medical facilities. Not only is there low utilization of medical facilities by the lower socio-economic group, but there is also high morbidity and mortality. As is noted in a U.S. Department of Health, Education and Welfare publication:

In spite of the existence of a complex set of inter-relationships of heredity, distribution and availability of medical facilities and services, behavior toward health care, environmental conditions, and socio-economic factors, which are difficult to distinguish, there is an undisputable association of increased morbidity and mortality with poverty. (italics mine)⁵⁴

The data show that a high proportion of persons from low income families have chronic conditions with limitation of activities, have almost double the days of restricted activity per year as compared to those with high incomes, have a larger proportion of multiple hospital episodes, low life expectancy, and high maternal and infant

mortality.⁵⁵ The publication also lists various barriers to the receipt of medical services by the poor. These are: inability to pay, fragmentation of care, operation features of providing the services, attitudes toward general health care, racial discrimination in providing services, and lack of medical facilities and manpower.⁵⁶

Socio-economic status plays a predominant role in the utilization of medical services. Graham, in examining the relationship between socio-economic status and the use of medical services, points out that the lower classes have a high proportion of illness, and also a low utilization of physician and hospital services.⁵⁷

He states:

A survey of past studies on the subject (of socio-economic status and illness) generally reveals that the greatest amount of illness is found amongst those socio-economic classes which are least able to pay for it.⁵⁸

Suchman also discusses the relationship between social class and the health status and utilization of health facilities. He states:

Socio-economic status constitutes one of the most important sources of social and medical differentiation in the United States. Almost all studies have shown that upper and lower social classes, however defined, have different values and norms and vary in both their health status and utilization of health facilities.⁵⁹

Lombard, likewise, reports that not only is the highest rate of illness found among the lower socio-economic classes, but also, persons of this class have the lowest rates of utilization of selected medical services.⁶⁰ Other earlier studies also report high illness episodes among the lower socio-economic group.⁶¹⁻⁶⁷ That the poor are afflicted with more illnesses than the rest of the population is also indicated by more recent studies. Recent figures show that

the rate of persons with limitations of activity due to chronic illnesses is about three times higher among those with annual incomes of less than \$3,000 than those who have incomes of \$10,000 and above.⁶⁸ Another study showed that "the annual rates of days per person of restricted activity, bed stay, and time lost from work were markedly greater for persons whose family income was less than \$4,000 a year than for higher income groups. In general, as income rose, the rate of disability decreased."⁶⁹ It was also found that "among persons in the labor force, the number of days per person per year of restricted activity and bed disability were substantially greater for currently unemployed persons than for currently employed persons."⁷⁰ It is no wonder then that "the sick get poorer and the poor get sicker."

That the utilization of medical services is positively related to the socio-economic status is demonstrated by other studies. According to a national study, approximately 59 per cent of the persons with family income under \$2,000 had one or more physician visits during the year prior to the interview, whereas 72.8 per cent of the persons with family income of \$10,000 and over did so.⁷¹ Over three per cent (3.5%) of the persons with family income under \$2,000 reported never having seen a physician. However, as the income rose, the percentage reporting "never" declined.⁷² Also, as the education level rose the proportion of persons with at least one visit to the physician within a year of the interview also increased.⁷³ Another study showed that approximately 36 per cent of the families with incomes under \$3,000 had never seen a physician during the fiscal year 1966-7.⁷⁴ Another survey showed that the average estimated number of visits to a physician per person per year among those with family incomes of less

than \$2,000 was 4.6, while among those with incomes of \$7,000 or more the average was 5.7.⁷⁵ The Committee on the Cost of Medical Care found that among high income groups one out of four persons had a physical examination during the survey year, but among the low income families only one out of ten had been examined.⁷⁶

Similar findings are reported by various other national, local and regional studies. Lerner and Anderson and Somers and Somers report that the higher socio-economic groups are more likely than low socio-economic groups to obtain medical, dental and hospital services.⁷⁷⁻⁷⁸ Andersen and Anderson report that those with high incomes are more likely than those with low incomes to respond to a symptom by seeing a doctor, and more likely to have a recent medical examination, are more like to use a specialist's services and are more likely to have routine-preventive care.⁷⁹ Ross, from a recent study, reports that "as income, education and occupation rise, there is a corresponding rise in the amount of medical care received."⁸⁰ He found that lower class people seek medical care (when they do so at all) for a "felt" complaint.⁸¹ In conclusion, Ross reports that the use of "preventive care" is positively related to social class status. Upper class families are more likely to seek "preventive care" whereas lower class families are more likely to seek "symptomatic care."⁸² Other studies show the relationship between socio-economic status and the use of health services. Rosenstock indicated that preventive and detection services are used most by those who are relatively better educated and have higher incomes.⁸³ Graham reports that the lower the occupational status the less frequent are the visits to a physician.⁸⁴ Lowery, et al., in a study of rural families

found that the lower the occupational rank the lower the utilization of services.⁸⁵ They further report a positive relationship between educational and income levels and the use of medical services. Kwass,⁸⁶ Myers and Roberts,⁸⁷ and White⁸⁸ have all indicated a positive relationship between an individual's social class position and his utilization of medical-care services. A 1964 study indicates that the proportion of people who receive no medical is three times as high for families with incomes under \$2,000 as for families with income over \$7,000.⁸⁹ The families with under \$2,000 income had fewer hospital visits; only one-third of the low income families had medical insurance as compared to seven-eighths of the families with incomes over \$7,000; and only 40 per cent of these families had insurance-paid hospital bills as compared to 81 per cent of the families with incomes over \$7,000.

Suchman, in describing the relationship between socio-economic status and medical-care utilization, reports that the higher one's socio-economic status, the more likely one is to have periodic health checkups, polio immunization, eye examinations, dental checkups, and health insurance.⁹⁰ Financial considerations become a powerful determinant when one has to pay for health examinations and the proportion of persons going to a doctor solely for health examination declines.⁹¹⁻⁹²

It seems reasonable to state that where substantial cost is involved, those with better financial resources are more likely to use services than those in poor financial condition. While due to this factor, there are consistent income-related differences

in the use of health services in the United States, such differences are less pronounced in the United Kingdom, where health care is available under the National Health Service.⁹³

Financial considerations play an important role in one's decision initially to seek medical assistance. A nation-wide survey reports that 30 per cent of the respondents "put off" medical care because they were unable to afford it.⁹⁴ Another study conducted in 1961 reports that 55 per cent of the families with incomes under \$5,000 put off seeing a doctor because of cost.⁹⁵ A survey of nurses reveals that of all those who reported that some member of their family was failing to receive medical care, 66 per cent responded they could not afford it.⁹⁶ Horton and Leslie cite various statistics to indicate that low income families need more medical care but are unable to obtain it primarily because of economic reasons.⁹⁷ Muller also reports that the low income families "put off" seeking medical care due to economic reasons.⁹⁸ Even in the presence of a symptom, 50 per cent of the low income families consulted a physician while 75 per cent of the families with high incomes did so.

Bugbee lists two factors in the medical care system which directly affect those with low incomes.⁹⁹ First is the failure of the present medical care system to make available all the benefits of medical science to those least able to afford it. Often the poor are unable to make use of the present medical system and as a result receive a fraction of services needed. Second, the medical care low income families receive is often of lower quality. Bugbee has this to say: "The difference between the level of care for this substantial,

if diminishing, segment of our population represents important unfinished business."¹⁰⁰

The person from the low socio-economic stratum are also less likely to possess "sophisticated" knowledge and information about symptoms and sickness and more likely to respond to symptoms from a different cultural perspective. Lower-class persons are less likely than those in the higher social stratum to recognize the symptoms of major illness, to use routine preventive care, but are more likely to hold irrational views about health, rely upon folk medicine, and postpone or delay seeking medical care.¹⁰¹⁻¹⁰² Koos' study showed that the lower-class (Class III) respondents were less likely than the Class I and Class II respondents to be sensitive to various symptoms and to consider that these symptoms required the attention of a physician.¹⁰³ Simmons noted that the lower-class families have less extensive knowledge of modern medicine. He states:

Lower class families are characteristic of greater economic insecurity than high income families and show less extensive knowledge pertaining to modern medicine than do higher status people. . .¹⁰⁴

Low income families tend to be less "skilled" in the use of professional medical services.¹⁰⁵⁻¹⁰⁶ Zborowski indicates that more educated patients are more conscious of their health and are more aware of pain as a possible symptom of a serious disease.¹⁰⁷

Studies indicate that education level is related in several different ways to the use of health-care services. Pratt, et al report that the degree of accurate information concerning the nature of an illness and its treatment is positively related to educational level.¹⁰⁸ Cobb maintains that educational level is related to attitude toward the physician.¹⁰⁹ Anderson and Rosen indicate that the utilization of complex modern medical services

calls for a "medically sophisticated population" possessing the knowledge and understanding most likely to be lacking in less educated segments of the society.¹¹⁰

The studies discussed so far show the relationship between socio-economic status and utilization of health services. The studies show a positive relationship between educational and occupational level and the use of services. There is no question that the monetary cost is a significant barrier to seeking care among those who have limited economic means. The differential utilization of dental and medical services by socio-economic status disappears in large part, when medical services are made available to those lower on the socio-economic ladder. Socio-economic differences in the utilization of health services comparable to those found in the U.S. do not exist in Great Britain, where services are provided under the National Health Service.¹¹¹⁻¹¹²

One's decision to seek help and the form of help one seeks may also depend upon the availability of and accessibility to treatment resources. There is a disproportionate distribution of resources between rural and urban areas. The rural areas are lacking in supply of both health personnel and medical facilities.¹¹³

We have also noted that the differential use of health services related to cultural and ethnic differences, orientations toward health and sickness. Those from the lower-class are less likely to possess "sophisticated" knowledge and information about symptoms and sickness and are less likely than those in the higher social stratum to recognize the symptoms of illnesses or to use preventive care, but are more likely to hold irrational views about health, rely upon folk medicine and postpone or delay seeking professional assistance. The differences in beliefs about illness among the

various social classes are more pronounced regarding psychiatric disorders.¹¹⁴⁻¹¹⁵ The lower-class people are more likely than upper class to use home remedies and patent medicines and postpone seeking professional assistance.¹¹⁶⁻¹¹⁸ However, it is difficult to ascertain which factors lead to delay in treatment: definition of symptoms, knowledge, monetary cost, or availability of and accessibility to health services.¹¹⁹⁻¹²⁴ The literature also suggests that working-class persons feel more uncomfortable in dealing with professionals who have high status and different values and orientations.¹²⁵⁻¹²⁸

Review of other studies shows that socio-economic status is also related to immunizations and dental care. Studies of the polio vaccination program show that those accepting the vaccine have more education, income, and come from higher social classes.¹²⁹⁻¹³⁶

Socio-economic status is also positively related to the use of dental care. While nearly everyone seems to have some type of dental problem and contemporary professional dental standards call for semi-annual examinations, available data show that less than one-half of the population in this country received dental care in a given year. A U.S. National Health Survey shows that 42 per cent of the civilian, noninstitutional population, made one or more dental visits within the year prior to the interview and approximately 16 per cent of the population had never seen a dentist. In all age groups, females were more likely than males to have visited a dentist within the year prior to the interview.¹³⁷ The data showed a strong relationship between both education and income and dental care patterns.

The percentage of persons with one or more dental

visits within the year rose sharply with increasing income and increasing education and, correspondingly, the proportion who had never seen a dentist decreased as the amount of education and income advances. Cross-classification of income and education illustrates the independent relationship of each variable to the recency of dental care.¹³⁸

Approximately 64 per cent of those with family income of \$10,000 and over, 22.7 per cent of those with family income under \$2,000 visited a dentist within the year prior to the interview. Almost 62.6 per cent of those with education 13 years and more and 18.5 per cent with education under 5 years, saw a dentist within the year prior to the interviews.¹³⁹ Similar findings are reported by other national surveys,¹⁴⁰⁻¹⁴² and by Anderson and Feldman,¹⁴³ and Pelton.¹⁴⁴ Andersen and Anderson report that "the percentage of persons seeing a dentist rises consistently with increasing family income, from a low of 16 per cent for those with incomes of less than \$2,000 to 58 per cent for those having incomes of \$10,000 or more."¹⁴⁵ Anderson and Feldman,¹⁴⁶ and Suchman and Rothman,¹⁴⁷ in their studies show a positive relationship between income and use of dental services. These findings are consistent with those of Muller.¹⁴⁸ Approximately 22 per cent of the families with incomes under \$2,000 visited a dentist during the survey year while 57.7 per cent of the families with incomes of \$7,000 and above saw a dentist during the same period. Muller also reports that income is positively related to routine dental visits for cleaning and examination of teeth (high income families 21.8 per cent, low income families 12.2 per cent), and the rate of dental extractions is four times higher for low-income families than for high income families. Muller's findings show that the low income families as compared to high income families are less likely to

participate in preventive dental care, such as regular visits for checkups, cleaning and x-rays and more likely not to visit the dentist at all. Kriesberg and Treiman from their study report that 69 per cent of those with incomes of \$7,000 and above and 31 per cent of those with incomes under \$2,000 visited a dentist.¹⁴⁹

We noticed above that the rate of dental extractions is four times higher for low income families than for high income families. Other studies have also reported that dental extractions are proportionately higher for individuals in the lower socioeconomic classes.¹⁵⁰⁻¹⁵¹

In addition to income, education is also positively related to the utilization of dental services. Thirty-four per cent of those who had eight years or less of education, 58 per cent of those with some high school education, and 74 per cent of those with college education had been to the dentist within one year of the survey.¹⁵² Kreisberg and Treiman also report that one of the most important factors precipitating a visit to the dentist was "condition" of the teeth. When asked what precipitated the visit to the dentist, one-third of the respondents replied "pain," and one-third replied that "other dental problems" motivated them to seek dental treatment. Only 30 per cent indicated that the dental visit was a routine checkup. The authors state that "... any persons of higher status go to the dentist preventively, (and) many persons of lower status do not go to the dentist even when they think they need dental care."¹⁵³

Data on preventive dental health care show a positive relationship between occupational status and use of dental services.

Nikias reports that the higher the occupational status the higher the rate of persons receiving dental care in an average year. For instance, semi and unskilled workers visited a dentist at the rate of 27 persons per 100 persons, clerical workers at the rate of 45 and professionals at the rate of 58.¹⁵⁴ He reports that "the higher the occupational level, the greater was the number of persons who sought any care and the number of visits made and services received."¹⁵⁵

That a positive relationship exists between socio-economic status (education, income, occupation) and use of dental services is substantiated by other studies.¹⁵⁶⁻¹⁶⁶

The findings on maternal-infant care show a strong positive relationship between socio-economic status and the utilization and adequacy of medical services. This is despite the observation that such care is of paramount importance. Andersen and Anderson state that "one of the cornerstones of preventive medicine is health services for expectant mothers before, during and shortly after delivery. Optimum obstetrical care requires that the patients see the physician early and regularly."¹⁶⁷ Their own findings show that the proportion of mothers from upper income and education groups who saw a doctor early in pregnancy is substantially greater than the proportion of mothers from lower income and education group. For instance, 58 per cent of the mothers with low incomes (under \$4,000) saw a doctor in the first trimester of pregnancy as compared to 86 per cent of the middle income mothers (\$4,000-\$7,000) and 88 per cent of the upper income mothers (\$7,000 and above). Considering education

68 per cent of the mothers with eight years or less of education saw a physician during the first trimester of pregnancy while 88 per cent of the mothers with college education saw a doctor during this time period. Women with higher education and income not only went to the doctor earlier, but also saw him more frequently in each time period.¹⁶⁸

Brightman, et al, report that 46 per cent of the mothers on Public Assistance (Accepting Aid to Dependent Children), received a prenatal examination during the first three months of pregnancy while 91 per cent of the higher income mothers and 72 per cent of mothers living in low income housing received this care.¹⁶⁹ Approximately one-fifth of the Public Assistance mothers did not receive maternal care until the sixth month of pregnancy and they also had fewer visits to the doctor.

Women from the upper classes see the physician early for prenatal care, see the physician more frequently, are more likely to receive postpartum care, and are likely to be under a specialist's care than a general practitioner.¹⁷⁰⁻¹⁷⁵

In summary, the data presented above show that lower socio-economic groups have not only a high proportion of illness episodes, activity-limiting symptoms, low life expectancy, high maternal and infant mortality, but also, a low utilization of medical services and facilities. The review of literature shows that various indicators of socio-economic status are positively related to the use of physician's services, preventive care, dental care, and services, and maternal-infant care. Financial considerations play an important role in one's decision even to seek medical assistance, that is, seeking care is often "put off." Studies also show cultural, ethnic and social class differences both in the perceptions of seriousness of symptoms and the utilization of services. Socio-economic status affects utilization of services both directly (for example, one's

ability to pay for services) and indirectly, as it is related to such factors as values and attitudes toward health, knowledge and information concerning health and disease and perception of availability of services.

Summary

Theoretical orientations may be classified in broad general terms into two categories, namely socio-cultural and socio-psychological. In the former the emphasis is primarily on the role of ethnic and cultural differences in health and illness behavior. The latter approach is concerned more with socio-psychological variables and their affect on decision processes both in the definition of the situation (realization of being ill) and the decision to seek help. The role of socio-economic factors is implicit in these discussions, but is less clearly recognized.

The review of empirical literature shows socio-cultural differences in illness behavior patterns. Studies also show a positive relationship between socio-economic status and the use of health services and facilities. Socio-economic status affects the use of health services both directly (i.e., one's ability to pay for services) and indirectly, as it is related to such factors as values and attitudes toward health, knowledge and information concerning disease and perception of the availability of services.

FOOTNOTES CHAPTER II

¹For an extend review of theoretical and empirical literature see also other publications of Maine's Regional Medical Program Research and Evaluation Service: Robert A. Bendiksen and Bhopinder S. Bolaria, Social Correlates of Expected Solutions to Selected Illness Symptoms of Children, July, 1970; Allen A. Spencer and Bhopinder S. Bolaria, Social Correlates of the Utilization of Medical Services, July 1970; Suzanne N. Selig and Bhopinder S. Bolaria, Attitudinal and Social Correlates of Health and Sickness Behavior of American Indians in the State of Maine, August 1970; George A. Heming and Bhopinder S. Bolaria, Social Correlates of the Utilization of Selected Health-Care Services: A Study of Fifteen Communities, August 1970.

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³Ibid., p. 249.

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⁵Ibid.

⁶Ibid., p. 540.

⁷Stanley H. King, Perceptions of Illness and Medical Practice (New York: Russell Sage Foundation) 1962.

⁸David Mechanic, "The Concept of Illness Behavior" Journal of Chronic Diseases, Vol. 15 (Feb. 1962) pp. 189-194; and "Some Implications of Illness Behavior for Medical Sampling," New England Journal of Medicine, 269 (August 1963) pp. 244-247.

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¹⁶ Ronald Anderson, A Behavioral Model of Families' Use of Health Services, Center for Health Administration Studies (Chicago: University of Chicago Press) 1968, p. 14.

¹⁷ Ibid.

¹⁸ Ibid.

¹⁹ Ibid., p. 16.

²⁰ Ibid.

²¹ P. Feldstein, "Demand for Medical Care," The Cost of Medical Care, Volume 1, American Medical Association, 1964, p. 57.

²² Earl L. Koos, The Health of Regionville (New York: Hafner Publishing Company) 1967, p. 160.

²³ Ibid., pp. 138-157.

²⁴ Ibid., pp. 156-157.

²⁵ L. Saunders, Cultural Differences and Medical Care (New York: Russell Sage Foundation) 1954.

²⁶ M. Clark, Health in the Mexican-American Culture (Berkeley: University of California Press) 1959.

²⁷ B. Paul (ed) Health, Culture and Community (New York: Russell Sage Foundation) 1955.

²⁸ A. Leighton and D. Leighton, The Navaho Door (Cambridge: Harvard University Press) 1945.

²⁹ Margaret Mead, Cultural Patterns and Technical Change, UNESCO, World Federation for Mental Health, 1953.

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CHAPTER III

HEALTH, ILLNESS EPISODES AND HEALTH CARE: ADULTS

The use of health-care services depends upon several factors, such as the occurrence of illness episodes, availability of medical care, attitudes toward health and one's ability to procure medical services. Most of the data available in this area show that health-services utilization is directly related to socio-economic (income, education and occupation) status. The lower socio-economic groups are less likely than high socio-economic groups to utilize medical services and facilities. Not only is there low utilization of medical services and facilities by the lower classes, but there is also high morbidity and mortality among the lower classes. The studies show that a high proportion of persons from low income families have chronic conditions with limitation of activities, have almost double the days of restricted activity per year as compared to those with high incomes, have a larger proportion of multiple hospital episodes, low life expectancy and high maternal and infant mortality. Socio-economic status is positively related to the use of physician's services, dentist's care, maternal care, and routine preventive care.

In this chapter the empirical findings from the present study are presented for the adult sample population. Data are reported on current health or medical problems; physical disabilities, paralysis and other activity-limiting conditions and symptoms; physician and hospital services, routine preventive care; solutions to selected illness symptoms/conditions; use of home remedies and patent medicines; dental care and services; potential use and preference for services,

knowledge of and attitudes toward family planning; and family's health practices

Family Health and Medical Problems

One of the purposes of this study was to determine the the health-care needs of these low-income families. The respondents were asked: "Are there any specific family health or medical problems which you need help with now?" Approximately 57 per cent of the families indicated that they had various current (at the time of the study) health or medical problems for which they needed immediate help (Appendix A, Table A-18).

The respondents report a multitude of problems. From among the various listed health and medical problems, dental care was the most frequently mentioned. Approximately 79 per cent (Table 14) currently need dental care. Other current family health-related problems relatively most frequently indicated are: 21.6 per cent clothing, 19.3 per cent heat, 15.8 per cent water supply, 15.2 per cent chronic medical conditions and 14.6 per cent toilet facilities. Other less frequently reported problems are: sick child, family planning, diet and food preparation, alcoholism, sick wife or husband, and skin conditions.¹

In addition to medical problems (dental care, chronic medical conditions and sickness), it should be noted that many of these families live in rather inadequate physical and sanitary conditions. As the above data show, inadequate heat, water supply, clothing and toilet facilities are among the major problems of these families. Consequently, to alleviate their medical problems, one must also

TABLE 14
 DISTRIBUTION OF SPECIFIC FAMILY HEALTH OR MEDICAL PROBLEMS
 REQUIRING IMMEDIATE HELP
 (Families with health or medical problems, N = 171)

Specific Problems	Frequency	Per cent	N
Sick child	10	5.8	171
Family planning	4	2.3	171
Diet and food preparation	5	2.9	171
Alcoholism	2	1.2	171
Water supply	27	15.8	171
Toilet facilities	25	14.6	171
Sick wife	5	2.9	171
Sick husband	10	5.8	171
Dental care	135	79.5	171
Chronic medical conditions	26	15.2	171
Clothing	37	21.6	171
Heat	33	19.3	171
Skin conditions	8	4.7	171
Other ^a	13	7.6	171

^aIncludes such items as: speech defects, tonsils, eyes, blood cells.

pay attention to their living conditions, as their medical problems are related to and perhaps produced by their impoverished physical surroundings.²

Physical Disabilities, Paralysis, and Limitation of Activity and Mobility

The poor are afflicted with more illnesses than the rest of the population. Recent figures show that the rate of persons with limitation of activity due to chronic illnesses affecting their work activities is about three times higher among those with annual incomes of less than \$3,000 than those who have incomes of \$10,000 and above.³ Another study showed that "the annual rates of days per person of restricted activity, bed stay, and time lost from work were markedly greater for persons whose family income was less than \$4,000 a year than for higher income groups. In general, as income rose, the rate of disability decreased."⁴ It was also found that "among persons in the labor force, the number of days per person per year of restricted activity and bed disability were substantially greater for currently unemployed persons than for currently employed persons."⁵

In the present study data were collected of activity-limiting symptoms/conditions, physical disabilities, and partial or complete paralysis. These questions were asked separately for husband and wife.

The respondents were asked if it is difficult for them and their spouses to "get around" due to the following symptoms: chest pain; shoulder or arm pains; palpitations (rapid heart beating); severe shortness of breath; severe indigestion; swelling of feet or ankles; blueness of lips or fingernails; and painful or swollen

joints. The data reported in Table 15 show that for 39 per cent of the wives and 51.1 per cent of husbands it was difficult to "get around" due to these conditions.

The data on specific symptoms are reported in Table 16. Multiple symptoms are reported both for husband and wife. In the case of wives the most frequently reported (40.7 per cent) symptoms/conditions are chest pain, shoulder or arm pains and the least frequently reported (28 per cent) symptoms are bluness of lips or fingernails. Approximately one-third or more of the wives (31-38 per cent), have palpitation, shortness of breath, swelling of feet or ankles or painful or swollen joints, and a little over 19 per cent have severe indigestion.

In the case of husbands the most frequently reported (52.2 per cent) activity-limiting symptoms/conditions are chest pain, shoulder or arm pain and the least frequently reported (7.2 per cent) are bluness of lips or fingernails. Approximately one-fourth or more (24-34 per cent) have palpitations, severe indigestion, swelling of feet or ankles and 39-42 per cent have painful or swollen joints and/or shortness of breath.

The respondents were further asked if they or their spouses presently (at the time of the study), have any physical disability. The responses indicate (Table 17) that 24.2 per cent of the wives and 35.6 per cent of the husbands have physical disabilities. Additional data show that of those with disabilities 69 per cent of the wives and 56.3 per cent of the husbands were receiving treatment for physical disabilities, approximately two-thirds of both wives and husbands have been hospitalized, and a majority of them know whom to contact for rehabilitation. However, it must be noted that 37.3

TABLE 15
LIMITATION OF MOBILITY DUE TO VARIOUS CONDITIONS AND
SYMPTOMS BY HUSBAND AND WIFE

Do any symptoms make it difficult to get around?	Wife		Husband	
	F	%	F	%
Yes	108	39.0	69	51.1
No	167	60.3	66	48.9
No information	2	0.7	0	0.0
Total	277	100.0	135	100.0

TABLE 16
DISTRIBUTION OF SPECIFIC ACTIVITY-LIMITING SYMPTOMS AND
CONDITIONS BY HUSBAND AND WIFE

Specific activity- limiting symptoms	Wife			Husband		
	F	%	N	F	%	N
Chest pain, shoulder or arm pains	44	40.7	108	36	52.2	69
Palpitations	34	31.5	108	16	23.2	69
Shortness of breath	37	34.3	108	29	42.0	69
Severe indigestion	21	19.4	108	16	23.2	69
Swelling of feet or ankles	40	37.0	108	17	24.6	69
Blueness of lips or fingernails	3	2.8	108	5	7.2	69
Painful or swollen joints	41	38.0	108	27	39.1	69

TABLE 17
CURRENT PHYSICAL DISABILITIES BY HUSBAND AND WIFE

Physical disability	Wife		Husband	
	F	%	F	%
Yes	67	24.2	48	35.6
No	210	75.8	86	63.7
No information	--	----	1	0.7
Total	277	100.0	135	100.0

TABLE 18
RESPONSES TO SPECIFIC QUESTIONS CONCERNING DISABILITY

Specific questions	Affirmative responses					
	Wife			Husband		
	F	%	N	F	%	N
Presently being treated for it	46	69.7	67	27	56.3	48
Been hospitalized for it	41	61.2	67	32	66.7	48
Need medical help now	25	37.2	67	23	47.9	48
Know who to contact for rehabilitation	35	52.2	67	36	54.2	48
Want to work within physical limitations	20	29.9	67	17	35.4	48
Want help in seeking employment	7	10.4	67	3	6.3	48
Willing to move to where a job was available	2	3.0	67	3	6.3	48
Feel that with training could return to work	8	11.9	67	8	16.7	48
Receiving financial support from a state agency	27	40.3	67	14	29.2	48
Receiving city or town financial aid	8	11.9	67	4	8.3	48
Receiving social security benefits	34	50.7	67	22	45.8	48

per cent of the wives and 47.9 per cent of the husbands need medical help for their conditions (Table 18).

Approximately one-third of both wives and husbands (29.9 per cent and 35.4 per cent respectively) want to work within their physical limitations, a few of them want help in seeking employment, some are willing to move where jobs are available, and some feel (11.9 per cent of wives and 16.7 per cent of husbands) that with training they could return to work. Their primary sources of financial support regarding disabilities are State agencies, city or town help or Social Security benefits.

The respondents were also asked if they or their spouses had ever had partial or complete paralysis of one side of the body. The responses show (Table 19) that 7.9 per cent of the wives and 10.4 per cent of the husbands have had partial or complete paralysis.

In cases where the response was affirmative, the respondents were asked: "Did you or your spouse have any of the (listed) specified conditions?" These data are presented in Table 20. The findings show that both wives and husbands have a multiplicity of these symptoms/conditions. The most often reported conditions are: numbness or tingling, difficulty in talking, dimming or blurring of vision, headache, feeling of being off-balance, unsteadiness of walk, and dizziness or nausea. Other conditions are relatively less frequently reported.

Responses to a specific question concerning (if they ever had) stroke, cancer, heart disease and heart attack show that 3-8 per cent of wives and husbands have had these illnesses (Table 21).

TABLE 19

PARTIAL OR COMPLETE PARALYSIS OF ONE SIDE OF THE BODY BY HUSBAND AND WIFE

Have had partial or complete paralysis	Wife		Husband	
	F	%	F	%
Yes	22	7.9	14	10.4
No	254	91.7	121	89.5
No information	1	0.4	--	---
Total	277	100.0	135	100.0

TABLE 20

SYMPTOMS AND CONDITIONS RELATED TO PARALYSIS BY HUSBAND AND WIFE
(Those who have had paralysis, Wives 22, Husbands 14)

Symptoms and Conditions	Wife			Husband		
	F	%	N	F	%	N
Unconscious at any time	5	22.7	22	6	42.9	14
Numbness or tingling	13	59.1	22	10	71.4	14
Difficulty in talking	6	27.3	22	8	57.1	14
Dimming or blurring of vision	7	31.8	22	8	57.1	14
Seeing double	4	18.2	22	3	21.4	14
Difficulty in understanding words	1	4.5	22	2	14.3	14
Confusion about where they were or about what was happening	3	13.6	22	2	14.3	14
Headaches	11	50.0	22	7	50.0	14
Feeling of being off-balance	14	63.6	22	8	57.1	14
Unsteadiness of walk	11	50.0	22	7	50.0	14
Dizziness or nausea	9	40.9	22	4	28.6	14
Difficulty in swallowing	3	13.6	22	3	21.4	14
Sudden deafness	4	18.2	22	3	21.4	14
Noise in the ears	7	31.8	22	3	21.4	14

20

20

The data presented so far show that these families have numerous health or medical problems and that the adults (husbands and wives) have a multiplicity of activity-limiting symptoms and conditions. The findings also show that about one-fourth of the wives and about one-third of the husbands had physical disabilities; approximately eight per cent of the wives and close to 10 per cent of the husbands have had partial or complete paralysis and approximately three per cent of the wives and husbands have had stroke.

One should be somewhat cautious about these findings. There might be some over-lapping of responses to these questions. For instance, approximately 15 per cent of the families indicate that they have chronic medical conditions (under family health or medical problems), some of the respondents may be referring to the conditions reported later concerning activity-limiting symptoms and conditions, and the other responses concerning partial or complete paralysis and stroke. Even if one grants that there might be some over-lapping of responses (that is, one illness episode reported more than once), it is still quite apparent that these families are afflicted with many chronic illnesses and have many activity-limiting symptoms and conditions. These illness-episodes take on added significance when they interfere with adults' daily activities and employment. Consequently they might be unable to assume "gainful" and steady employment due to these illnesses, and are destined to stay in perpetual poverty conditions. Under these circumstances they have to rely upon State, Federal and private assistance for both medical care and livelihood.

Physician and Hospital Services: Accessibility and Availability

One of the objectives of the present study was to assess the availability of and accessibility to various health services by the low-income families. One such area of study was physician and hospital services.

Our data show (Table 22) that a little over 86 per cent of the families in our sample reported that they have a "family doctor." However, when asked about general accessibility to a doctor, almost 48 per cent indicated that it is difficult for their families to see a physician (Table 23). Those who reported lack of access to a physician were asked to indicate reasons for it. These data are reported in Table 24. Multiple reasons were reported. From among the various reasons, the most frequently mentioned, three-fourths of the respondents, was "transportation." The second most frequently endorsed reason (38.2 per cent) was financial considerations, that is, inability to pay the doctor. Other reasons for lack of accessibility to a physician are related primarily to the availability of the physician and respondents' ability to see the physician during certain hours. For instance, 15.3 per cent indicate that doctor's office hours are inconvenient and 7.9 per cent report that they cannot get an appointment. Only three respondents mentioned that the fear that the doctor might find something seriously wrong with them as a reason for not seeing a physician.

It will be recalled that the most frequently mentioned reason for lack of access to a physician was transportation problem. In this context it should be pointed out that 54 per cent of those

TABLE 22
SAMPLE POPULATION WITH A FAMILY DOCTOR
N = 301

Do you have a family doctor?	Frequency	Per cent
Yes	260	86.4
No	40	13.3
No information	1	0.3
Total	301	100.0

TABLE 23
GENERAL ACCESSIBILITY TO A PHYSICIAN
N = 301

Is it difficult for your family to see a doctor?	Frequency	Per cent
Yes	144	47.8
No	156	51.9
No information	1	0.3
Total	301	100.0

TABLE 24
DISTRIBUTION OF REASONS FOR LACK OF ACCESSIBILITY TO A PHYSICIAN
(Families reporting having difficulty in seeing a physician, N = 144)

Reasons	Frequency	Per cent	N
Unable to pay the doctor	55	38.2	144
Transportation	108	75.0	144
Doctor's office hours are inconvenient	22	15.3	144
Cannot get an appointment	11	7.6	144
Fear the doctor might find something seriously wrong	3	2.1	144

who had a family doctor, and 58 per cent of the sample families were less than five miles away from family physician and the nearest physician, respectively.⁶ Many of these families do not have private transportation and cannot afford expenses for other transportation facilities.

That these families have numerous "unmet" medical-care needs and lack access to physician and hospital services is evident from the other data collected during the interviews. For instance, responses to other questions show (Table 25) that 9.4 per cent of the wives and 15.6 per cent of the husbands have had an ailment for which they did not receive a doctor's care, and 5.8 per cent of the wives and 7.4 per cent of the husbands have had an ailment which they thought required hospitalization but were not hospitalized. Also, 8.3 per cent of the wives and 9.6 per cent of the husbands did not receive medical attention even when advised by a physician and 7.2 per cent of the wives and 8.1 per cent of the husbands were not hospitalized even when a physician had advised them that they needed hospitalization.⁷

It is evident from our data that the lack of financial resources is the most often mentioned reason why husbands and wives did not receive a doctor's care and were not hospitalized, both when they themselves thought that they needed these services and even when advised by a physician.⁸ The reason most often given both for husband and wife for not receiving a physician's care (when they thought they should have) was "no money." From the reasons given for not having been hospitalized, it is apparent that "financial problems" and "no one to take care of children" are the primary reasons

TABLE 25

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The findings from various studies show that the upper classes are more likely than the lower classes to use preventive care. In the present study data were collected on physical examinations, reasons for such examinations, chest x-ray, electrocardiogram, cancer "pap" test, and general patterns of preventive health checkups and the reasons for not receiving health checkups.

The data on physical examinations (Table 26) show that approximately 63 per cent of the wives and 47.7 per cent of the husbands had physical examinations within two years of the time of the interview. At the other extreme nine per cent of the wives and 14.6 per cent of the husbands have never had a physical examination. In addition, a little over ten per cent of the wives and 13.8 per cent of the husbands had been examined five or more years ago.¹⁰ These data also show that the length of time since the most recent physical examination varies according to sex. For instance, a higher proportion of wives than husbands have been examined recently, and a lower proportion of wives than husbands have never had a physical examination.

It is recognized that the fee-for-service system of medicine is not conducive to preventive health care. The low income families are less likely than high income groups to avail themselves of preventive care. In this context, of particular importance is the data on reasons for most recent physical examination. The responses indicate (Table 27) that a majority of both husbands and wives had physical examinations due to a symptom of illness, rather than for preventive reasons. Specifically, 69.7 per cent of the wives and 62.7 per cent of the husbands had the last physical examination due to a symptom of illness.

TABLE 26
LENGTH OF TIME SINCE MOST RECENT PHYSICAL EXAMINATION BY
HUSBAND AND WIFE

Time since last examination	Wife		Husband	
	F	%	F	%
During the year of the study (1969)	113	42.4	49	37.7
1 year ago (during 1968)	54	20.2	13	10.0
2 years ago (during 1967)	26	9.7	12	9.2
3 years ago (during 1966)	13	4.9	8	6.2
4 years ago (during 1965)	11	4.1	11	8.5
5 or more years ago	26	9.7	18	13.8
Never	24	9.0	19	14.6
Total	267 ^a	100.0	130 ^b	100.0

^aSeven responses "don't know" and three "no information."

^bFour responses "don't know" and one "no information."

TABLE 27
DISTRIBUTION OF REASONS FOR MOST RECENT PHYSICAL EXAMINATION
BY HUSBAND AND WIFE
(Those who have had examination)

Reasons for examination	Wife		Husband	
	F	%	F	%
Symptom of illness	168	69.7	69	62.7
Preventive	73	30.3	41	37.3
Total	241 ^a	100.0	110 ^b	100.0

^aEight responses "don't know" and four "no information."

^bThree responses "don't know" and three "no information."

The data on chest x-ray, electrocardiogram, cancer "pap" test show that these families do not receive adequate preventive care. These health-screening tests may be very important for early diagnosis and treatment of disease.

The findings on chest x-rays are presented in Table 28. A little over 37 per cent of the wives and 42 per cent of the husbands have never had a chest x-ray; in addition, a little under 15 per cent of the wives and about 17 per cent of the husbands have had a chest x-ray five or more years ago. On the other hand, a little under one-third of the wives and husbands had chest x-rays within two years of the time of the interview.

The data on electrocardiogram (ECG or EKG) indicate (Table 29) that almost three-fourths of the wives and husbands, either have never had an electrocardiogram or had it over five years ago.

The findings reported in Table 30 show that 40 per cent of the wives have never had a cancer "pap" test, and another seven per cent had it over five years ago.

To ascertain further the nature of preventive-care received by these families the respondents were asked: "Do you or your spouse have regular health checkups even when you are well?" The responses in Table 31 show that a little over three-fourths of the husbands and almost 70 per cent of the wives do not receive regular preventive checkups. The primary reason for not receiving preventive care is financial. Table 32 shows that the reasons most often given for adults not receiving routine-preventive care are "too expensive," "no need for checkups in good health," "only go when sick," "no transportation," and "do not get to it-no time."

TABLE 28
LENGTH OF TIME SINCE MOST RECENT CHEST X-RAY BY HUSBAND AND WIFE

Time since last x-ray	Wife		Husband	
	F	%	F	%
During the year of the study (1969)	35	13.0	24	18.3
1 year ago (during 1968)	41	15.2	15	11.5
2 years ago (during 1967)	27	10.0	7	5.3
3 years ago (during 1966)	16	5.9	4	3.1
4 years ago (during 1965)	10	3.7	4	3.1
5 or more years ago	40	14.8	22	16.9
Never had a chest x-ray	101	37.4	55	42.0
Total	270 ^a	100.0	131 ^b	100.0

^aFive responses "don't know" and two "no information."

^bTwo responses "don't know and two "no information."

TABLE 29
LENGTH OF TIME SINCE MOST RECENT ELECTROCARDIOGRAM BY HUSBAND AND WIFE

Time since last electrocardiogram	Wife		Husband	
	F	%	F	%
One year or less	28	10.2	21	15.6
Between 1 and 5 years	27	9.7	13	9.6
Over 5 years	15	5.4	7	5.2
Never	203	73.3	93	68.9
No information	4	1.4	1	0.7
Total	277	100.0	135	100.0

TABLE 30
LENGTH OF TIME SINCE MOST RECENT CANCER "PAP" TEST BY WIFE

Time since last cancer "pap" test	Wife	
	F	%
One year or less	77	27.8
Between 1 and 5 years	55	19.9
Over 5 years	20	7.2
At the time of last pregnancy	14	5.1
Never	111	40.0
Total	277	100.0

TABLE 31
GENERAL PATTERN OF REGULAR PREVENTIVE HEALTH CHECKUPS
BY HUSBAND AND WIFE

Do you and spouse have regular health checkups?	Wife		Husband	
	F	%	F	%
Yes	88	32.0	31	23.0
No	188	67.9	102	75.5
No information	1	0.1	2	1.5
Total	277	100.0	135	100.0

TABLE 32
DISTRIBUTION OF REASONS FOR NOT HAVING REGULAR HEALTH CHECKUPS
BY HUSBAND AND WIFE
(Those not having checkups, wife N = 188, husband N = 102)

Reasons	Wife			Husband		
	F	%	N	F	%	N
Too expensive	79	42.0	188	43	42.2	102
No insurance	14	7.4	188	8	7.8	102
No transportation	21	11.2	188	7	6.9	102
Feel no need for checkups in good health	31	16.5	188	21	20.6	102
Only go when sick	29	15.4	188	21	20.6	102
Do not get to it. no time	20	10.6	188	8	7.8	102
Other reasons	23 ^a	12.2	188	15 ^b	14.7	102

^aAllergic to too many medicines (1), do not think it is worth the wait (3), too difficult (5), scared (6), can't get an appointment (5), too tired (1), no one to take care of children (2).

^bScared (7), too tired (1), Dying of cancer (1) feels doctors are not very smart (2), afraid doctor might find something wrong (2), cannot get appointment (2).

The findings presented above show that these families do not receive adequate preventive care. One of the factors which might influence one's decision to seek care is one's attitudes toward personal health and medical care. Some writers relate the use of health services to knowledge, attitudes and socio-medical orientations.¹¹ The lower classes seem to be more skeptical of the value of routine preventive care, early consultation and treatment, and these attitudes subsequently may interfere with their receipt of medical care in time.¹² Other studies show that "positive" attitudes toward health and health-care may not be reflected in one's actual use of health-care services.¹³ Other factors such as monetary cost and availability of and accessibility to medical facilities may be important considerations in the utilization of services.

The data presented earlier in this study showed that the respondents generally express "positive" attitudes toward routine-preventive care and recognize the importance and desirability of routine visits to a physician and preventive health checkups. However, as that data on the actual use of routine-preventive care show, these families have a rather low utilization of such services primarily due to financial considerations and nonavailability of and inaccessibility to various medical facilities. These factors prevent these families from using services even when they place a "positive" value on health. Removal of these barriers may bring a closer correspondence between their attitudes (desirability of preventive care) and their actual utilization of such services.

Solutions to Specific Illness Symptoms/Conditions

We were also interested in knowing the respondents' view of "proper" behavior in the presence of particular symptoms. Each respondent was presented with a list of 19 symptoms and/or conditions ranging from more severe to most common ailments. For each of these symptoms the respondents were asked if they would (1) take the adult member to a hospital, (2) call a doctor for a home visit, (3) make appointment at the doctor's office (visit a doctor's office), (4) consult doctor on the phone, (5) see a nurse, (6) use home remedies (maternal care), (7) consult relatives, friends or neighbors, and (8) just wait until it goes away. It must be emphasized that the respondent was asked what he would do, not what he should do.

Table 33 shows that in almost all the cases a majority of the respondents are most likely to seek a physician's assistance. However, in case of headache, lower back pain, persistent indigestion and any change in normal bowel habits, 10-19 per cent would use home remedies. Also, 10-13 per cent indicate that they would "wait until it goes away" in case of headache, lower back pain and shortness of breath.

For further analysis reaction to symptoms are classified into three categories, namely, "medical," "non-medical," and "no action." The "medical" category includes: take to hospital, call a doctor for a house visit, visit doctor's office, consult doctor on the phone and see a nurse. The "non-medical" category includes: use of home remedies and consultation with relatives, friends or neighbors and in the "no action" category, just wait until it goes

TABLE 33
EXPECTED SOLUTIONS TO SELECTED ILLNESS SYMPTOMS/CONDITIONS (IN PER CENT)

Symptoms/Conditions	Take to Hospital	Call Doctor for a House Visit	Consult Doctor's Office	Consult Doctor on the Phone	See a Nurse	Home Remedies	Consult Relatives, Friends, Etc.	Wait Until it Goes Away	No Information	N
1. Any sore that does not heal	2.0	4.0	77.4	12.3	---	3.0	---	1.0	0.3	301
2. Vision problems	1.0	4.3	80.4	9.6	0.3	1.0	---	2.7	0.7	301
3. Blackouts-fainting	3.7	5.3	73.8	13.6	---	2.3	---	1.0	0.3	301
4. Chest pain	3.3	5.6	73.4	11.3	---	2.3	---	3.7	0.3	301
5. Excessive bleeding	12.0	3.7	70.8	10.0	---	2.0	---	0.3	1.3	301
6. Discharge	2.0	3.7	77.1	12.0	---	2.7	---	2.0	0.7	301
7. Frequent fever	1.3	4.3	68.8	15.6	---	7.0	0.3	1.3	1.3	301
8. Headache	1.7	1.7	37.2	10.6	---	18.9	---	10.6	1.0	301
9. Lower back pain	0.7	1.7	53.5	13.6	---	18.9	---	13.0	0.7	301
10. Shortness of breath	1.3	3.3	61.1	15.6	---	5.0	---	13.0	0.7	301
11. Swelling of feet or ankles	0.7	2.7	63.8	15.6	---	7.3	---	8.6	1.3	301
12. Persistent indigestion	0.7	2.7	65.8	13.0	---	11.0	---	5.0	2.0	301
13. Blueness of lips and fingernails	3.7	3.0	73.8	13.6	---	1.3	---	4.0	0.7	301
14. Palpitations	2.3	4.0	67.8	12.6	0.3	1.7	---	8.3	3.0	301
15. A lump or thickening in the breast or elsewhere	1.0	2.7	86.0	9.3	---	0.7	---	0.3	---	301
16. Any change in a wart or mole	1.0	2.7	77.7	10.6	0.3	1.0	0.7	5.0	1.0	301
17. Difficulty in swallowing	2.0	2.7	76.7	11.0	---	2.7	0.3	4.3	0.3	301
18. Persistent hoarseness or cough	1.0	2.7	72.4	11.6	---	5.6	1.0	4.0	1.7	301
19. Any change in normal bowel habits	1.3	3.0	67.1	11.3	---	10.3	---	6.3	0.7	301

away. These data are reported in Table 34. It is apparent that in all cases except headache, a substantial proportion of the respondents would seek "medical" assistance rather than use home remedies or consult relatives, friends, and neighbors or take "no action." Even in the case of headache, a little over 50 per cent would seek "medical" assistance. These data also show that visits to the doctor's office is the most often mentioned reaction to these symptoms.

A high proportion of respondents in this sample recognize the desirability of professional attention for such a wide range of symptoms and conditions. However, they seem to place least confidence in nurses for such care. Our findings are inconsistent with studies which indicate that lower classes show less sensitivity to various symptoms.¹⁴

Use of Home Remedies and Patent Medicines

The high cost of drugs, physician services, hospitalization and other costs often leads the poor people (or those who cannot afford these) to use folk-medicines and remedies.¹⁵ Reliance may be placed on chiropractors and on a "lay referral" net work of friends and relatives for health care.¹⁶ It has been noted that the medical chests of the poor are quite likely to contain many home remedies.¹⁷

The data from the present study show that the families interviewed have had a wide variety of home remedies and patent medicines (not prescribed by a doctor). The respondents were presented a list of home remedies and medicines and were asked to indicate if they have and have used these remedies. The data indicate (Table 35) that a very high proportion of the families have painkillers, salves

TABLE 34
EXPECTED SOLUTIONS TO SELECTED ILLNESS SYMPTOMS/CONDITIONS (IN PER CENT)

Symptoms/Conditions	Medical Action ^a	Non-Medical Action ^b	No Action ^c	No Information	N
1.Any sore that does not heat	95.7	3.0	1.0	0.3	301
2.Vision problems	95.6	1.0	2.7	0.7	301
3.Blackouts-fainting	96.4	2.3	1.0	0.3	301
4.Chest pain	93.6	2.3	3.7	0.3	301
5.Excessive bleeding	96.5	2.0	0.3	1.3	301
6.Discharge	94.8	2.7	2.0	0.7	301
7.Frequent fever	90.0	7.3	1.3	1.3	301
8.Headache	50.6	41.5	10.6	0.7	301
9.Lower back pain	69.5	18.9	13.0	1.0	301
10.Shortness of breath	81.3	5.0	13.0	0.7	301
11.Swelling of feet or ankles	84.5	7.3	8.6	1.3	301
12.Persistent indigestion	82.2	11.0	5.0	2.0	301
13.Blueness of lips or fingernails	94.1	1.3	4.0	0.7	301
14.Palpitations	87.0	1.7	8.3	3.0	301
15.A lump or thickening in the breast or elsewhere	99.0	0.7	0.3	---	301
16.A change in a wart or mole	92.3	1.7	5.0	1.0	301
17.Difficulty in swallowing	92.4	3.0	4.3	0.3	301
18.Persistent hoarseness or cough	87.7	6.6	4.0	1.7	301
19.Any change in normal bowel habits	82.7	10.3	6.3	0.7	301

^aMedical action includes: take to hospital, call a doctor for house visit, visit doctor's office, consult doctor on phone and see a nurse.

^bNon-medical action includes: use of home remedies and consult relatives, friends, etc.

^cNo action (just wait until it goes away).

TABLE 35
USE OF HOME REMEDIES AND PATENT MEDICINE

Home remedies and patent medicine	Those who reported that they have these medicines			Those who have used these medicines and remedies		
	F	%	N	F	%	N
Salves, ointments	243	80.7	301	131	53.9	243
Tonics	55	18.3	301	24	43.6	55
Purgatives	205	68.1	301	75	36.6	205
Liniments	173	57.5	301	74	42.8	173
Painkillers	285	94.7	301	234	82.1	285
Antiseptics	252	83.7	301	137	54.4	252
Sleeping pills	30	10.0	301	11	36.7	30
Vitamins	119	39.6	301	74	62.2	119
Stomach settlers	173	57.4	301	83	48.0	173
Cold remedies	225	74.8	301	97	43.1	225
Cough remedies	224	74.4	301	93	41.5	224
Piles, hemorrhoid remedies	59	19.6	301	26	44.1	59
Eye drops	76	25.3	301	24	31.6	76

or ointments, antiseptics, cold remedies and cough remedies, and 57-58 per cent of the families have stomach settlers, liniments and purgatives. Approximately one-fourth of the families have eye drops and over one-third have vitamins. However, a small proportion of the families have tonics, sleeping pills and piles or hemorrhoid remedies.¹⁸

Further information was elicited from those who did have various home remedies and patent medicines. These respondents were asked if they or any member of the family have used these remedies during the month preceding the interview. A high proportion (82.1 per cent), who had painkillers have used these during the month. A majority of them (53-62 per cent) have used salves, ointments, antiseptics, and vitamins, and 41-48 per cent have used cough remedies, piles-hemorrhoid remedies, cold remedies, stomach settlers, liniments and tonics and approximately one-third have used the remaining remedies and medicines.

It was noted earlier that the high cost of drugs and other medical services often leads the poor people to use home remedies. Our findings indicate that not only do a substantial proportion of low-income families have home remedies and patent medicines (not prescribed by a doctor), but also, a substantial proportion of them use these medicines. These findings are consistent with Syvrud's study, which showed that low income older people reported more frequent use of folk medical practices and less utilization of modern medical services and facilities.¹⁹

Dental Care and Services

The review of literature presented in Chapter II shows that the use of dental care is positively related to socio-economic status. Moreover, low income families are less likely than high income families to participate in preventive dental care.²⁰

In this study data were collected on the most recent visit to a dentist, reasons for visits, if the respondents see a dentist when they think they should, reasons for not seeing a dentist and general pattern of visits to the dentist.

The data on most recent visit to a dentist by husband and wife are reported in Table 36. A lower proportion of the wives than husbands have never been to a dentist and a little over one-half of the wives and about two-third of the husbands saw a dentist five or more years ago. Also, females are more likely than males to have visited a dentist during the year prior to the study year, 20.1 per cent and 14.7 per cent, respectively.²¹ The remaining adults saw a dentist within 2-4 years prior to the interviews. Neither husband nor wife saw a dentist during the study year.

We noted earlier that people from low income groups are likely to visit a dentist (if they visit at all) for symptomatic reasons, whereas those from high income groups are more likely to visit a dentist for preventive care. Table 37 shows that a little over 89 per cent of the wives and 92.8 per cent of the husbands saw a dentist for symptomatic reasons (dental problems). It is quite apparent that only a few of them receive preventive dental care.

When the respondents were asked, if they always see a dentist when they think they should, only one-fifth reported affirmatively.

TABLE 36
LENGTH OF TIME SINCE MOST RECENT VISIT TO A DENTIST BY
HUSBAND AND WIFE

Time since last visit	Wife		Husband	
	F	%	F	%
1 year ago (during 1968)	52	20.1	19	14.7
2 years ago (during 1967)	21	8.1	9	7.0
3 years ago (during 1966)	27	10.4	7	5.4
4 years ago (during 1965)	20	7.7	4	3.1
5 or more years ago	134	51.8	81	62.8
Never	5	1.9	9	7.0
Total	259 ^a	100.0	129 ^b	100.0

^aEighteen no information. ^bSix no information.

TABLE 37
REASONS FOR MOST RECENT VISIT TO THE DENTIST BY HUSBAND AND WIFE
(Those who have been to a dentist)

Reasons	Wife		Husband	
	F	%	F	%
Symptomatic (dental problem)	243	89.3	117	92.8
Preventive (routine dental checkups)	13	4.8	4	3.2
No information	16	5.9	5	4.0
Total	272	100.0	126	100.0

(Table 38). Those who do not see a dentist (when such a visit is desirable) indicated various reasons. Table 39 shows that lack of financial resources is the primary reason (76.5 per cent) for not seeing a dentist.²² In addition, approximately 22 per cent have "no transportation."²³ Other reasons are: fear of getting hurt, dentist's office hours are inconvenient and cannot get an appointment with a dentist.

Additional data show that husband and wife do not have any regular pattern of visits to a dentist. The respondents were asked: "How often do you and your spouse generally see a dentist?" Table 40 shows that 77.2 per cent of the wives and 82.3 per cent of the husbands see a dentist "only when absolutely necessary," and 11.2 per cent of the wives and 10.4 per cent of the husbands "never." Only a few of them have a general regular pattern of visits to a dentist.

The data presented here show that a majority of the husbands and wives have not been to a dentist for five years, and a very high proportion of them see a dentist, if at all, for symptomatic (dental problems) rather than preventive care. It is also evident that the primary barriers to receiving dental care are lack of financial resources (cannot pay the dentist), lack of transportation and non-availability of the dentist.¹⁴ Only a few of them indicate that they do not go to the dentist because of fear of being hurt.

The data presented earlier in Chapter I show that the respondents generally express "positive" attitudes toward preventive dental care and recognize the desirability and importance of regular preventive visits to a dentist. However, their "positive" attitudes

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TABLE 38
VISITS TO A DENTIST WHEN REQUIRED
N = 301

Do you always see a dentist when you think you should?	Frequency	Per cent
Yes	60	20.0
No	234	77.7
No information	7	2.3
Total	301	100.0

TABLE 39
DISTRIBUTION OF REASONS FOR NOT SEEING A DENTIST
(Those who don't see a dentist when they think they should 234)

Reasons	Frequency	Per cent	N
Cannot pay the dentist	179	76.5	234
Fear of getting hurt	18	7.7	234
No transportation	52	22.2	234
Office hours are inconvenient	22	9.4	234
Cannot get an appointment	18	7.7	234
Other	24	10.3	234

TABLE 40
GENERAL PATTERN OF VISITS TO THE DENTIST BY HUSBAND AND WIFE

General pattern	Wife		Husband	
	F	%	F	%
Never	31	11.2	14	10.4
Only when absolutely necessary	214	77.2	111	82.3
Regularly: once a year	7	2.5	1	0.7
Regularly: more than once a year	9	3.1	1	0.7
No information	16	5.8	8	5.9
Total	277	100.0	135	100.0

toward preventive dental care are not reflected in their actual use of such services, primarily due to financial and transportation problems. These factors prevent these families from using dental services, even when they consider such services desirable. The removal of these barriers may bring a closer correspondence between their attitudes (desirability of preventive dental care) and their actions (actual use of these services).

Potential Use, Preference, and Acceptability of Services

In this study data were also collected on respondents' attitudes and general receptivity to additional health services and facilities. These data may be useful in ascertaining the respondents' behavior if they were asked to participate in new health-care programs in the future.

A very high proportion of the respondents seem to be receptive to proposed services and facilities. Table 41 shows that a little over 91 per cent of the families would participate in a "health screening" program (to find out about undetected illnesses) if the program was offered at no cost to them, almost 95 per cent of the families would use a community health center or clinic and 79 per cent of the families would like help in finding out how to receive additional health care.²⁵

Additional data were collected on respondents' attitudes toward receiving health-information booklets. Table 42 shows that almost three-fourths of the respondents reported that they would use information booklets on how to obtain medical care and assistance, about 45 per cent would use information on first aid, 12 per cent on

TABLE 41
ATTITUDES TOWARD ADDITIONAL HEALTH SERVICES AND FACILITIES

Services	Those who responded affirmatively		
	Frequency	Per cent	N
Would like help if finding out how you and your family can get additional health care	238	79.0	301
Would you and your family use a community health center or clinic if available	285	94.7	301
Would you and your family take part in a program to find out if you have any illnesses you are not aware of at no cost	275	91.4	301

TABLE 42
POTENTIAL USE OF HEALTH-INFORMATION BOOKLETS

Health-information booklets	Those who would use health-information booklets		
	Frequency	Per cent	N
First aid	136	45.2	301
Baby care	36	12.0	301
Minor illness in children	114	37.9	301
When to call doctor	90	29.9	301
How to obtain medical care and assistance	218	72.4	301
Would not use any of the booklets	38	12.6	301

baby care, 37.9 per cent on minor illness in children and about 30 per cent reported that they would use information booklets on when to call a doctor. However, a little under 13 per cent reported that they would not use any of the information booklets.

It appears from these data that the respondents attach more importance to information on how to obtain additional care and assistance than information in any other area. It may be that they do not consider the information in other areas of much utility to them and the question of how to obtain medical care and assistance is at the forefront of their minds. This is not surprising when one considers the numerous illness episodes and the state of medical deprivation of these families.

Patients may be broadly classified as users of physicians, hospitals, clinics, specialists, or emergency care. In this study we were interested also to know the respondents' preferences for services. The respondents were asked, "If you were free to choose, what kind of health care would you like to have for your family?" Table 43 shows that more of the respondents would prefer to have "several specialists available to see each person depending upon the nature of illness," rather than "one doctor treat the whole family for any illness," or "several doctors available for use, for example, one for children and another one for adults." The lowest percentage of the respondents expressed preference for "several doctors available. . . one for children and another one for adults."

The data on types of medical services preferred for their children show (Table 44) that more of the respondents would prefer

TABLE 43
 TYPES OF MEDICAL SERVICES PREFERRED BY RESPONDENTS FOR THEIR FAMILIES
 N = 301

Types of Services	Frequency	Per cent
One doctor treat the whole family for and illness	114	37.9
Several doctors available for use, for example one for children and another one for adults	40	13.3
Several specialists available to see each person depending upon the nature of the illness	146	48.5
No information	1	0.3
Total	301	100.0

TABLE 44
 TYPES OF MEDICAL SERVICES PREFERRED BY RESPONDENTS FOR THEIR CHILDREN
 N = 301

Types of Services	Frequency	Per cent
The doctor who comes to your home to examine your child	53	17.6
The clinic where you have to take your child and where the equipment necessary for examination is available	162	53.8
The doctor whom you know you can find in his office during office hours	86	28.6
Total	301	100.0

to take their children to "a clinic where the equipment necessary for examination is available," than "a doctor who makes a house call to examine the children," or "a doctor who is available in his office during his office hours." The lowest proportion of the respondents expressed preference for "a doctor who makes a house call to examine the children."

These findings indicate that if the respondents had free choice that they would prefer specialists' services for family's health care. On the other hand they show greater preference for well equipped clinics for children's care.

In summary, a very high proportion of the families are receptive to various proposed services and facilities, attach more importance to information of how to obtain additional care and assistance than information in any other area, and given the free choice, they show a greater preference for specialists, services for family's health care, but show greater preference for well equipped clinics for children's care.

Knowledge and Attitudes Toward Family Planning

It is generally recognized that low-income families have less knowledge of birth control methods. In addition to various socioeconomic and socio-cultural factors, lack of knowledge of birth control methods is considered an important variable which might influence the effectiveness of birth control and other family planning programs.

In the present study we were interested to know both about their knowledge of birth control methods and their receptivity to various family planning programs. Table 45 shows that only one-half of the respondents indicate that they fully understand the modern

TABLE 45
KNOWLEDGE AND ATTITUDES TOWARD FAMILY PLANNING PROGRAMS

Family planning programs	Those who responded affirmatively		
	Frequency	Per cent	N
Fully understand the modern methods of birth control	152	50.5	301
Would use a family planning program if it were available	72	23.9	301
Would attend speaker-discussion program on family planning	62	20.6	301
Would use pamphlets and booklets on family planning	85	28.2	301
Would like individual counseling for family planning	27	9.0	301

TABLE 46
DISTRIBUTION OF WIVES WHO PRACTICE SELF-BREAST EXAMINATION FOR CANCER

Does wife practice self-breast examination for cancer?	Frequency	
	Frequency	Per cent
Yes	77	27.8
No	198	71.5
No information	2	0.7
Total	277	100.0

methods of birth control. However, a relatively small proportion of the respondents indicate their willingness to participate in family planning programs. Pamphlets and booklets of family planning seem to be more acceptable to them than any other program, as a slightly higher percentage (28.2%) indicate that they would use family planning information. The respondents appear to be most resistant to individual counseling on family planning, as only nine per cent of them show preference for it. Only about one-fifth of them indicate that they would participate in discussion programs on family planning.

Overall, only one-half of the sample indicate that they fully understand modern birth control methods. However, a relatively small proportion of the respondents indicate their willingness to participate in family planning programs.²⁶ Among the various proposed programs, the highest preference was expressed for pamphlets and booklets and the lowest preference for individual counseling on family planning. It may be that the respondents would be most receptive to programs which offer them some degree of anonymity.

Health Practices

In this study data were collected also on the hygienic, preventive and other practices followed at home by these families. Earlier our emphasis has been on the utilization, availability and accessibility to various medical services and facilities by these families. However, here we are primarily concerned with the practices followed by these people to preserve their health.

Table 46 shows that less than one-third (27.8 per cent) of the wives practice self-breast examination for cancer. However, only 35 per cent of those who practice self-breast examination have

received instruction on how to do it.²⁷

Our findings presented earlier show that most adult members of these families do not receive adequate dental care. The data presented later on children's dental care show that not only do most of the children have dental problems, but also, that they receive inadequate dental care. However, here we are interested in knowing about the families' dental hygiene practices. Table 47 shows that in 94 per cent of the families everyone has his own toothbrush, and approximately 55 per cent of the families reported that they use fluoridated toothpaste.

Regarding dental hygiene and preventive practices for children, about 78 per cent of the families self-examine their children for cavities or bleeding gums. As Table 48 shows, approximately one-third of the families reported that they usually have candy in their homes for children.

Another area investigated in this context was the children's use of vitamin or mineral supplements. Table 49 shows that close to 46 per cent of the families with children 18 years of age or younger reported that their children use vitamins and mineral supplements. The major supplement was multivitamins. Approximately 73 per cent of the families reported that their children use multivitamins from the drug store. A little under 11 per cent of these families reported that their children use cod liver oil and another six per cent reported that their children use vitamin C. Approximately one-fifth of the families use other physician-prescribed vitamin or mineral supplements for their children. These data are reported in Table 50.

TABLE 47
DENTAL HEALTH-CARE PRACTICES BY FAMILIES

Dental Health-Care Practices	Those who responded affirmatively		
	Frequency	Per cent	N
Does everyone in your family have his own toothbrush?	283	94.0	301
Does your family use toothpaste with fluoride in it?	166	55.1	301

TABLE 48
CHILDREN'S DENTAL HEALTH-CARE PRACTICES BY FAMILIES
(Those who had children 18 years of age or younger, N = 183)

Dental Health-Care Practices	Those who responded affirmatively		
	Frequency	Per cent	N
Do you check your children for cavities or bleeding gums?	143	78.2	183
Do you usually have candy in your home for your children?	63	34.4	183

TABLE 49
CHILDREN'S USE OF VITAMIN OR MINERAL SUPPLEMENTS BY FAMILIES
(Families with children 18 years of age or younger, N = 183)

Do children take vitamins. . .	Frequency	Per cent
Yes	84	45.9
No	96	52.5
No information	3	1.6
Total	183	100.0

TABLE 50
TYPES OF VITAMIN OR MINERAL SUPPLEMENTS USED BY CHILDREN BY FAMILIES
(Families who reported their children use supplements, N = 84)

Types of Vitamin or Mineral Supplements	Frequency	Per cent	N
Multivitamins from drug store	61	72.8	84
Cod liver oil	9	10.7	84
Vitamin C (ascorbic acid)	5	6.0	84
Prescription from physician	18	21.5	84

Summary

That the poor are afflicted with more illnesses than the rest of the population is substantiated by many studies. A majority of the families in this study indicated that they had various health or medical problems which needed immediate help. These problems ranged from dental care and chronic medical conditions to inadequate physical and sanitary conditions, such as, toilet facilities, clothing, inadequate heat and water supply. Consequently, to alleviate their health and medical problems, one must pay attention to their living conditions, as these problems may be a by product of their impoverished physical surroundings.

The data on activity-limiting symptoms and conditions show that the adults have a multiplicity of these symptoms and conditions. For 39 per cent of the wives and 51 per cent of husbands it was difficult to "get around" due to various conditions. In addition our findings indicate that about one-fourth of the wives and about one-third of the husbands had physical disabilities and approximately eight per cent of the wives and close to 10 per cent of the husbands have had partial or complete paralysis. Even in one grants that there might be some overlapping of responses (that is, one illness episode reported more than once) it is still quite apparent that these families are afflicted with many chronic illnesses and have many activity limiting symptoms and conditions. These illness episodes take on added significance when they interfere with adults' daily activities and their employment. Consequently they might be unable to assume "gainful" and steady employment due to these illnesses, and are destined to stay in perpetual poverty conditions.

Not only do these families have numerous illnesses, but they also lack access to a physician. For instance, a little under 50 per cent of the respondents reported that it is difficult for their families to see a physician. Our findings show that lack of financial resources is the primary reason for lack of accessibility to a physician and for "unmet" medical care needs. The other reasons appear to be related to these financial problems, for example, their inability to afford transportation, to pay a baby sitter for children or to pay for cost of prescriptions. Other reasons for lack of accessibility to a physician are related primarily to the non-availability of the physician and respondents' inability to see the physician during certain hours.

Despite the fact that the respondents generally express "positive" attitudes toward routine preventive care and recognize the importance and desirability of routine visits to a physician and preventive health checkups, our findings on the actual use of routine-preventive care show that these families have a rather low utilization of such services primarily due to financial considerations and non-availability of and inaccessibility to various medical facilities. These factors prevent these families from using health services even when they place "positive" value on these services. Removal of these barriers may bring a closer correspondence between their attitudes (desirability and importance of preventive care) and their actions (actual utilization of such services).

The high cost of drugs, physician services, hospitalization and other costs often lead the poor to rely upon folk-medicines and remedies for their health care. Our findings indicate that not only

do a substantial proportion of these families have home remedies and patent medicines, but that a substantial proportion of them use these medicines.

Our findings on dental care and services are consistent with the findings reported above on routine-preventive care. A majority of the husbands and wives have not been to a dentist for 5 years and a very high proportion of them see a dentist, if at all, for symptomatic rather than preventive care. It is evident that the primary barriers to receiving dental care are lack of finances (cannot pay the dentist), lack of transportation and nonavailability of the dentist. Only a few of them indicate that they do not go to the dentist because of fear of being hurt.

Regarding anticipated use of additional services and facilities, a very high proportion of the respondents are receptive to the idea of a health-screening program, a health center or clinic, and help in finding out how to receive additional health care. Regarding health information booklets, the respondents attach more importance to information on how to obtain additional care and assistance than information in any other area. It may be that they do not consider the information in other areas of such utility to them and the question of how to obtain medical care and assistance is at the forefront of their minds. This is not surprising when one considers the numerous illness episodes and the state of medical deprivation of these families. Given the free choice, the respondents show preference for specialists, services for family's health care and indicate preference for a well-equipped clinic for children's care.

Overall, one-half of the sample indicate that they fully understand modern birth control methods. However, a relatively small percentage of the respondents indicate that they would participate in various family planning programs. Among the various proposed programs, the highest preference was expressed for pamphlets and booklets and the lowest preference for individual counseling on family planning. It may be that the families would be most receptive to programs which offer them some degree of anonymity.

The findings on family's health practices show that approximately 28 per cent of the wives practice self-breast examinations for cancer. However, only one-third of those who practice self-breast examination have received professional instructions on how to do it. Regarding dental hygiene practices, our findings indicate that in 94 per cent of the families everyone has his own toothbrush, a majority of the families report that they use toothpaste with fluoride, and over three-fourths of the families examine their children for cavities or bleeding gums. Close to 46 per cent of the families reported that their children use vitamin and mineral supplements.

FOOTNOTES CHAPTER III

¹Of those who reported that they had current (at the time of the study) health or medical problems needing immediate help, 29.8 per cent of them indicated that they would like to have a nurse come to discuss these problems (Appendix A, Table A-13).

²See, U. S. Department of Health, Education and Welfare, "Annual Statistical Review, Hospital and Medical Service Fiscal Year 1968," U. S. Public Health Service Publication (Washington D.C., U. S. Government Printing Office, March 1968). This publication reports that many infectious diseases among the American Indians are associated with their impoverished living conditions. "Crowded housing aids the rapid spread of upper respiratory tract infections. Inadequate sanitary facilities and substandard diets are apparent to some degree in the majority of the American Indian Communities and increase the susceptibility of its inhabitants to this disease. p. 34.

³U. S. Department of Health, Education and Welfare, "Limitation of Activity and Mobility Due to Chronic Conditions: United States July 1965-June 1966," Vital and Health Statistics, Series 10, No. 45 (May 1968) p. 10.

⁴U. S. Department of Health, Education and Welfare, "Disability Days-United States-July 1963-June 1964," Vital and Health Statistics, National Center for Health Statistics, Series 10, No. 24, 1965, p. 8.

⁵Ibid., p. 9 (For other studies see Chapter II)

⁶The data on the distance from a family doctor show that of those who had a family doctor, 53.7 per cent reported that they travel less than five miles to see their physician, 16.2 per cent 5-9 miles, 10.4 per cent 10-14 miles, 13.5 per cent 15-19 miles and 5.9 per cent 20 or more miles (See Appendix A, Table A-19).

The data on distance from the nearest doctor show that a little over 58 per cent report that the nearest physician is less than five miles away, 15.6 per cent 5-9 miles and 11 per cent 10-14 miles, 11 per cent 15-19 miles and 3.4 per cent 20 or more miles (See Appendix A, Table A-20).

The data on distance to nearest hospital show that 28.6 are within five miles of a hospital, 17.9 per cent 5-9 miles, 32.6 per cent 10-14 miles, 16.3 per cent 15-19 miles, 3.3 per cent 20-24 miles and one per cent 25 miles or more (See Appendix A, Table A-21).

⁷The self-appraised ailments for which wives did not receive doctor's attention are: arthritis, pneumonia, miscarriage, asthma, dermatitis, stomach cramps, pluriy, convulsions, glands, flu and colds, knee problems, childbirth, heart and emphysema.

The self-appraised ailments for which husbands did not receive doctor's attention are: severe cuts, ulcers, arthritis, pneumonia, chest pain, eyes, circulatory-blood, flu and cold, aches and pains, kidney, shock, stroke, epilepsy.

The self-appraised ailments for which wives were not hospitalized are: miscarriage, kidney infection, gall bladder, lung collapsed, blood-circulatory, strep-infection, over dose of penicillin, broken back, nerves, childbirth, rupture, nervous breakdown, epilepsy and Asian flu.

The self-appraised ailments for which husbands were not hospitalized are: bad back, arthritis, ulcers, loss of use of limbs, nervous breakdown.

The ailments (advised by a physician) for which wives did not receive medical attention: miscarriage, bad back, circulatory-blood problems, gall bladder, stomach ailments, kidney infections, internal examination, nerves, heart, rupture, thyroid and tonsils.

The ailments (advised by a physician) for which husbands did not receive medical attention: bad back, ulcers, arthritis, stomach ailments, epilepsy.

The ailments (advised by a physician) for which wives were not hospitalized: vomiting, pelvic region, gall bladder, strep infection, miscarriage, stomach rupture, heart and asthma.

The ailments (advised by a physician) for which husbands were not hospitalized: gall bladder, bleeding ulcers, arthritis, stomach rupture.

However, another question was asked regarding hospitalization during 1968: The reasons for wife's hospitalization are: pregnancy, operation, infection, nerves, broken bones, teeth, miscarriage, disc, glands, hysterectomy, gall stones, heart ailments, breakdown, rundown condition, cancer, hemorrhoids, overdose penicillin, x-rays, virus in lungs, shocks, hardening of arteries, sun stroke, circulation, epilepsy.

The reasons for husbands' hospitalization are: amputation, operation, ulcers, broken bones, disc, gall stones, cyst, accident, heart, cancer, hernia, x-rays, legs paralyzed, kidney problem.

⁸ See Appendix A, Table A-14 to A-17.

⁹ For example see, U. S. Department of Health, Education and Welfare, "Physician Visits: Interval of Visits and Children's Routine Checkups," Vital and Health Statistics, Series 10, No. 19, 1965; "Volume of Physician Visits: United States, July 1966-June 1967," Vital and Health Statistics, Series 10, No. 49, 1968; See also review of literature in Chapter II.

¹⁰ The data on most recent visit to a physician for any reason show that 62 per cent of the wives and 55.2 per cent of the husbands had visited a doctor during the year 1969 (the year of the study), and 16.7 per cent of the wives and 11.9 per cent of the husbands visited a doctor during the year 1968. However, approximately 7 per cent of the wives and 11.9 per cent of the husbands had not been to a physician for five or more years, (Appendix A, Table A-22). For visits to specific medical person during the year 1968 by husband and wife, see Appendix A, Table A-23.

¹¹See for example: Daniel Rosenblatt and Edward A. Suchman, "The Underutilization of Medical-Care Services by Blue-Collarites," in Arthur B. Shostak, William Gomberg (eds.), Blue-Collar World, Prentice Hall, 1964, pp. 341-349; J. A. Ross, "Social Class and Medical Care," Journal of Health and Human Behavior, 3 (Spring 1962); Saxon Graham, "Socio-Economic Status, Illness and the Use of Medical Services," Milbank Memorial Fund Quarterly, 35 (January 1957) pp. 58-66; Irving K. Zola, "Illness Behavior of the Working Class: Implications and Recommendations," in Arthur B. Shostak and William Gomberg, Blue-Collar World, Prentice Hall, 1964, pp. 350-361; S. Lowry, et al., "Factors Associated with the Acceptance of Health Care Practices Among Rural Families," Rural Sociology, 23 (June 1958) pp. 198-202; E. A. Suchman, "Health Orientations and Medical Care," American Journal of Public Health, 56 (November 1965) pp. 97-105; E. A. Suchman, "Sociomedical Variations Among Ethnic Groups," American Journal of Sociology, 70 (1964) pp. 319-331; E. A. Suchman, "Social Patterns of Illness and Medical Care," Journal of Health and Human Behavior, 6 (1965) pp. 2-16; D. Phillips, "Self-Reliance and the Inclination to Adopt the Sick Role," Social Forces, 43 (1965) pp. 555-563; G. MacGregor, "Social Detriments of Health Practices," American Journal of Public Health, 51 (November 1961) pp. 1709-1714; Lyle Saunders, Cultural Differences and Medical Care. (New York: Russell Sage Foundation) 1954. For other studies see Chapter II.

¹²Earl L. Koos, The Health of Regionville (New York: Columbia University Press) 1954.

¹³See for example, Edward Hassinger and Robert L. McNamara, "Stated Opinion and Actual Practice in Health Behavior in a Rural Area," Midwest Sociologist, 19 (May 1957); Suzanne M. Selig and Bhopinder S. Bolaria, Attitudinal and Social Correlates of Health and Sickness Behavior of American Indians in the State of Maine, A publication of Maine's Regional Medical Program Research and Evaluation Service, August, 1970.

¹⁴See particularly, E. L. Koos, The Health of Regionville New York: Columbia University Press) 1954. For instance, 23 per cent of Class III respondents (laborers), recognized that swelling of ankles needed a physician's attention, 21 per cent shortness of breath, 33 per cent fainting spells, 44 per cent lump in breast and 34 per cent lump in abdomen (p.32). Our findings appear to correspond more closely to Koos' Class I (professional or business) than to Class III respondents.

However, in comparing these findings with other studies, one should keep in mind the difference in methodology, different symptoms listed in other studies, the way questions were phrased and the study populations. See Jacob J. Feldman, The Dissemination of Health Information (Chicago: Aldine Publishing Company) 1966, pp. 60-64; See also, Robert A. Bendiksen and Bhopinder S. Bolaria, Social Correlates of Expected Solutions to Selected Illness Symptoms of Children, A publication of Maine's Regional Medical Program Research and Evaluation Service, July, 1970.

¹⁵"Cost and Acquisition of Prescribed and Nonprescribed Medicines: United States, July 1964-June 1965," Vital and Health Statistics, Series 10, No.33 (October 1966) p. 1; Gerald A. Syvrud, "Health-Practices Among Older People in Three Communities," unpublished M. A. Thesis, Department of Sociology, Washington State University, 1962.

¹⁶Eliot Freidson, "Client Control and Medical Practice," American Journal of Sociology, 65 (January 1960) pp. 374-383.

¹⁷Robert L. Eichhorn and Edward G. Ludwig, "Poverty and Health," in Poverty in Affluent Society, Hanna Meissner (ed.) (New York: Harper and Row) 1960, p. 179.

¹⁸See also Appendix A. Table A-25.

¹⁹Gerald A. Syvrud, op. cit.

²⁰See particularly: "Dental Visits: Time Interval Since Last Visit. United States-July 1963-June 1964," Vital and Health Statistics, Series 10, No. 29, 1966.

²¹The data on number of visits to a dentist during the year prior to the study year (1968), show that a majority of both husbands and wives visited a dentist once, 26.9 per cent of the wives and 26.3 per cent of the husbands twice, and the remaining three or more times (See Appendix A, Table A-27).

²²A few of these reported that a dentist refused to attend them because of lack of money.

²³The data on distance from a dentist show that 48.5 per cent are less than 5 miles away from a dentist, 14.3 per cent 5-9 miles, 20.6 per cent 10-14 miles, 12.6 per cent 15-19 miles, and four per cent 20 or more miles (see Appendix A, Table A-26).

²⁴See also our other publications: Allan A. Spencer and Bhopinder S. Bolaria, Social Correlates of the Utilization of Medical Services, and George Heming and Bhopinder S. Bolaria, Social Correlates of the Utilization of Selected Health-Care Services: A Study of Fifteen Communities, Publications of Maine's Regional Medical Program Research and Evaluation Service, July-August, 1970

²⁵Those families who had children 18 years of age and younger were asked: "Would you like help in finding out how often your children should see a doctor, nurse or dentist?" Approximately one-third of the families responded affirmatively (Appendix A, Table A-30).

In response to another question: "Would a specifically-trained nurse be acceptable to you to care for those of your children's health problems that do not require a doctor's attention?" A little over 57 per cent of those with children 18 years of age and younger responded affirmatively (Appendix A, Table A-31).

Those families with children 18 years of age and younger were asked: "Would a specifically-trained nurse be acceptable to you if you knew that she could discuss your children's health with a doctor at any time and that the doctor would see the children at scheduled times when well and at any time when sick?" Seventy-one per cent of the families responded affirmatively (Appendix A, Table A-32).

²⁶Our data show that only 6.6 per cent of the families had a child born during 1968 and the same proportion reported that they plan to have more children (Appendix A, Tables A-28, A-29).

²⁷See Appendix A, Table A-38. It may also be noted that seven of the wives (2.5 per cent) reported that they have had surgery for breast cancer, and about half of these cases were discovered by the wives themselves.

CHAPTER IV

CHILDREN'S HEALTH CARE

In Chapter III data were presented on the health care of the adults (husband and wife) in our sample. In this chapter data are reported on children's health care. The various areas covered are: Physician's services, routine preventive care, immunization of children, various health examinations, expected solutions to selected illness symptoms of children, and children's dental care. It may be noted here that most of these data were collected for children 18 years of age or younger. Therefore, questions were addressed only to those families who had children in this age group and there were 183 such families.

Physician's Care: Accessibility

In response to a general question reported earlier, approximately 48 per cent of the respondents indicated that it is difficult for their families to see a physician. The primary reasons given for lack of access to a physician were: transportation problems, monetary considerations, and unavailability of the physician. In the present context the question was specifically asked regarding children. Table 51 shows that for 45.4 per cent of the families with children 18 years of age or younger, it is not "convenient" to take their children to a doctor. From among the various reasons the most frequently given (61.4 per cent) was "have to rely upon friends for transportation." The other reasons mentioned are: "no car available," "doctor too busy," "can't go during doctor's office

TABLE 51
GENERAL ACCESSIBILITY TO A PHYSICIAN BY CHILDREN BY FAMILIES
(Families who had children 18 years of age or younger, N = 183)

Is it convenient for you to take your children to a doctor?	Frequency	Per cent
Yes	99	54.1
No	83	45.4
No information	1	0.5
Total	183	100.0

TABLE 52
DISTRIBUTION OF REASONS FOR LACK OF ACCESSIBILITY TO A PHYSICIAN
(Families who reported it is inconvenient to take children to a doctor, N = 83)

Reasons	Frequency	Per cent	N
No care available	9	10.8	83
Have to rely on friend for transportation	51	61.4	83
Doctor too busy	9	10.8	83
Can't go during doctor's hours	6	7.2	83
No one to take care of other children	18	21.7	83

TABLE 53
FINANCIAL CONSIDERATIONS IN CHILDREN'S HEALTH-CARE BY FAMILIES
(Families who had children 18 years of age or younger, N = 183)

Questions	Those responding affirmatively		
	Frequency	Per cent	N
Does lack of money ever keep you from taking your children to see a doctor or dentist?	121	66.1	183
Does the cost of prescriptions ever keep you from getting medicine of any kind for your children?	81	44.3	183

hours," and "no one to take care of other children" (Table 52).

However, when specifically asked if lack of money has ever kept them from taking their children to a doctor or dentist, two-thirds of the families responded affirmatively (Table 53).

Seeing a doctor may be only one step in procuring health services. If one is unable to afford the cost of medicines prescribed by a physician, then seeing a doctor may be of little value. In this context, when the respondents were asked if cost of prescriptions has ever kept them from getting medicines of any kind for their children a little over 44 per cent responded affirmatively.

These findings are consistent with the data reported earlier for adults. Monetary cost is a major obstacle to these families in procuring adequate health services. This is reflected both in their inability to take their children to a physician or a dentist and their inability to meet prescription expenses. To solve this problem it is necessary not only to remove financial barriers to health care, but also to deal with other problems which prevent these families from taking advantage of medical services, even if such services were available to them. For instance, even if all the medical services were to be free, the transportation problems and money to pay to a baby sitter for other children would be important barriers to these families in obtaining these services.

Routine-Preventive Health Care

It is recognized that it is a "good" medical practice to have routine checkups for children to detect health problems in their early stages. Early diagnosis is likely to increase the

chances of treatment and alleviation of any problems.

In a national study, 36.3 per cent of those under 17 years of age were reported to have had a routine physical examination within a year of the interview.¹ The data also show that "as family income rose, the proportion of the children with routine physical examinations increased in each succeeding income level. Similarly, as educational status of the head of the family increased, the proportion of children with routine checkups rose remarkably."² For instance 15.7 per cent of the children (under 17 years of age) with family income under \$2,000 and 53.9 per cent with family income \$10,000 and over had a routine physical examination within a year of the interview. Similarly, 14.1 per cent of the children where the family head had less than 5 years of schooling and 56 per cent of those where the family head had education of 13 years and more had a routine physical examination during the past year.³ Other findings in general show a positive relationship between socioeconomic status and children's health care.

The data reported earlier for adults show that a little over three-fourths of the husbands and almost 70 per cent of the wives do not receive regular preventive checkups. When a similar question was specifically asked about children, a little over 52 per cent (Table 54) of the families report that their children do not receive preventive checkups regularly. The reason most often mentioned for not receiving preventive care is financial, that is, unable to pay the doctor. A little over 42 per cent (Table 55) of the families mention it as a reason. Other reasons relatively frequently given are: no transportation (21.6 per cent), children don't need

TABLE 54
GENERAL PATTERN OF PREVENTIVE REGULAR HEALTH CHECKUPS FOR
CHILDREN BY FAMILIES
(Families who had children 18 years of age or younger, N = 183)

Do your children regularly get health checkups?	Frequency	Per cent
Yes	86	47.0
No	96	52.5
No information	1	0.5
Total	183	100.0

TABLE 55
DISTRIBUTION OF REASONS FOR CHILDREN NOT RECEIVING REGULAR
HEALTH CHECKUPS
(Families who reported that children do not receive checkups, N = 96)

Reasons	Frequency	Per cent	N
Don't need them	17	17.5	96
Unable to pay doctor	41	42.5	96
Doctor's office hours inconvenient	7	7.2	96
Cannot get an appointment	5	5.2	96
To transportation	21	21.6	96
No one to care for other children	8	8.2	96

them (17.5 per cent), and no one to take care of other children (8.2 per cent). Other reasons have to do both with doctor's non-availability (5.2 per cent cannot get an appointment) and respondents inability to take their children to a doctor during certain hours (for 7.2 per cent doctors' hours are inconvenient).

These findings show that in a majority of the families children do not receive regular preventive checkups due to financial considerations, lack of transportation, no one to take care of other children, non-availability of the physician, and their inability to take children to a physician during certain hours. However, a few of them stated the children "don't need" checkups. The primary reason given was that the children are "too young to receive regular checkups."⁴

The data on most recent medical examination by children show that a little over 45 per cent (Table 56) had medical examinations within two years of the time of the interview. At the other extreme, 16.4 per cent of the children have never been examined, and in addition, 8.1 per cent of the children had medical examinations three or more years ago.⁵

One of the most important areas of preventive care for children is various immunizations. It appears from our data that many of the children have not received these shots which are considered essential for children's health protection from a medical point of view. Table 57 shows that approximately one-third of the children 18 years of age or younger have never received smallpox, polio, DPT or DT shots and approximately 50 per cent of the children have never had measles shots. Only about one per cent of the child-

TABLE 56
 LENGTH OF TIME SINCE MOST RECENT MEDICAL EXAMINATION BY CHILDREN 18
 YEARS OF AGE AND YOUNGER
 N = 590

Time since last examination	Number	Per cent
1969 (during the study year)	134	22.7
1 year ago (during 1968)	135	22.9
2 years ago (during 1967)	32	5.4
3 or more years ago	48	8.1
Never been examined	97	16.4
Child too young	123	20.9
Examined, no other information	13	2.2
No information	8	1.4
Total	590	100.0

TABLE 57
 PROPORTION OF CHILDREN 18 YEARS OF AGE AND YOUNGER WHO HAVE HAD
 VARIOUS IMMUNIZATIONS

Immunizations	Frequency	Per cent	N
Smallpox	363	61.5	590
Polio	402	68.5	590
DPT	398	67.5	590
Measles	296	50.2	590
DT	358	60.7	590
Whooping cough	7	1.2	590
Flu	6	1.0	590
Chicken pox	8	1.4	590

ren have received other shots. Additional data show that many of the children have never had x-rays, hearing tests, vision tests and physical examinations. Table 58 shows that 84.5 per cent, 41 per cent, 39 per cent, 37.2 per cent, of the children have never had an x-ray, hearing test, vision test, and physical examination, respectively.⁶ Though our data is somewhat inadequate concerning the reasons for these tests it nevertheless does show that a majority of the cases these tests were for preventive rather than symptomatic reasons.⁷

We recognize, however, that the various immunizations and tests reported above are to a great extent, a function of the children's ages.⁸ This would be particularly true of immunizations, since many of these shots are generally given before age two. In addition, the age at which a child received inoculations is determined by the schedule set up by a physician for that particular child. Despite these reservations, however, the percentage of children who have not had inoculations and diagnostic tests is still high.

Reactions to Selected Illness Symptoms of Children

We were interested to know respondent's view of "proper" behavior in the presence of particular symptoms of children. Each respondent was presented with a list of 15 symptoms/conditions ranging from more severe to most common ailments. The respondents were asked: "If you thought your child has or had these symptoms, what would you do first?" The response categories are: take to hospital, call doctor for a house visit, visit doctor's office, consult doctor on the phone, see a nurse, use home remedies, consult relatives, friends, wait until it goes away. It must be noted that the respondent was

TABLE 58
LENGTH OF TIME SINCE MOST RECENT X-RAY, HEARING TEST, VISION TEST AND PHYSICAL EXAMINATION BY CHILDREN 18
YEARS OF AGE AND YOUNGER
N = 590

Time interval	X-ray		Hearing test		Vision test		Physical exam.	
	F	%	F	%	F	%	F	%
Less than 1 year ago (1969-1968)	32	5.4	172	29.2	189	32.0	201	34.1
2 years ago (1967)	6	1.0	36	6.1	36	6.1	32	5.4
3 years ago (1966)	4	0.7	24	4.1	16	2.7	18	3.1
4 years ago (1965)	4	0.7	9	1.5	8	1.3	13	2.2
5 or more years ago	11	1.9	43	7.3	41	6.9	41	7.0
Have never had test	499	84.5	242	41.0	229	39.0	220	37.2
Had test, no other information	7	1.2	35	5.9	35	5.9	32	5.4
No information	27	4.6	29	4.9	36	6.1	33	5.6

asked what he would do first, not what he should do.

Table 59 shows that respondents are least likely to take the child to a hospital, take no action (wait until it goes away), consult relatives or friends, or see a nurse. In the case of headache, cold, constipation and stomach ache, 60-71 per cent of the respondents reported that they would use home remedies first. A little over 50 per cent reported that they would use home remedies first even in case of cough (croup). A little over one-third (36-37 per cent) for chills and throwing up and 18-26 per cent for mumps and rash and fever would also use home remedies first. In the case of other symptoms and conditions a significantly high proportion of the respondents indicate that they would use physician's care right away, primarily in the form of a visit to a doctor's office.⁹

For further analysis reaction to symptoms are classified into three categories, namely, "medical action," "non-medical action," and "no action." The first category includes: take to a hospital, call a doctor for house visit, visit a doctor's office, consult doctor on the phone and see a nurse. The "non-medical" category includes: use home remedies and consult relatives, friends or neighbors and in "no action" category, just wait until it goes away. These data are presented in Table 60. It appears from these data that there is a tendency to take "non-medical" and "no action" first for "minor" symptoms and a tendency to take "medical action" for more "severe" symptoms. However, in the latter case the respondents seem to place least confidence in nurses for such care and are also least likely to use hospital services, but are most likely to use a physician's services.

TABLE 59
EXPECTED SOLUTIONS TO SELECTED ILLNESS SYMPTOMS OF CHILDREN BY FAMILIES (IN PER CENT)

Symptoms	Take to Hospital	Call Doctor for a House Visit	Visit Doctor's Office	Consult Doctor on the Phone	See a Nurse	Home Remedies	Consult Friends etc.	Wait Relatives Until it Goes Away	Information	N
1. Headache	---	0.3	7.0	7.3	0.3	70.8	---	2.3	12.0	301
2. Cold	---	0.3	8.0	7.0	0.3	70.8	---	2.0	11.7	301
3. Cough(croup)	0.7	1.7	21.9	12.6	0.3	50.8	---	1.0	11.0	301
4. Urinary Problems	0.7	2.7	66.8	14.3	---	4.0	---	0.3	11.3	301
5. Constipation	---	0.7	15.3	9.3	0.3	62.8	---	0.7	11.0	301
6. Rash and fever	0.7	3.3	42.9	15.0	---	25.9	---	0.3	12.0	301
7. Stomach ache	0.3	0.7	12.0	10.0	0.7	61.1	---	3.7	11.7	301
8. Very severe stomach ache	2.3	8.6	61.5	12.6	---	3.3	---	---	11.7	301
9. Running ear	1.0	3.3	67.1	10.6	---	5.6	---	0.3	12.0	301
10. Chills	1.0	3.3	32.2	12.6	0.3	36.9	0.7	1.7	11.3	301
11. High fever	1.3	7.6	55.1	17.9	---	6.3	---	---	11.7	301
12. Throwing up	0.3	2.0	33.6	10.3	0.3	37.2	0.3	3.3	12.7	301
13. Whooping cough	2.0	13.0	55.5	12.3	---	6.0	---	---	11.3	301
14. Mumps	0.7	8.0	44.5	15.3	---	18.6	---	1.3	11.7	301
15. Respiratory problems	3.3	4.0	66.4	12.0	---	2.7	---	---	11.7	301

TABLE 60
 EXPECTED SOLUTIONS TO SELECTED ILLNESS SYMPTOMS OF CHILDREN BY
 FAMILIES (IN PER CENT)

Symptoms	Medical Action ^a	Non-Medical Action ^b	No Action ^c	No Information	N
1. Headache	14.9	70.8	2.3	12.0	301
2. Cold	15.6	70.8	2.0	11.7	301
3. Cough (croup)	37.2	50.8	1.0	11.0	301
4. Urinary problems	84.5	4.0	0.3	11.3	301
5. Constipation	25.6	62.8	0.7	11.0	301
6. Rash and fever	61.9	25.9	0.3	12.0	301
7. Stomach ache	23.7	61.1	3.7	11.7	301
8. Very severe stomach ache	85.0	3.3	---	11.7	301
9. Running ear	82.0	5.6	0.3	12.0	301
10. Chills	49.4	37.6	1.7	11.3	301
11. High fever	81.9	6.3	---	11.7	301
12. Throwing up	46.5	37.5	3.3	12.7	301
13. Whooping cough	82.8	6.0	---	11.3	301
14. Mumps	68.5	18.6	1.3	11.7	301
15. Respiratory problems	85.7	2.7	---	11.7	301

^aMedical action includes: take to hospital, call doctor for house visit, visit doctor's office, consult doctor on phone and see nurse.

^bNon-medical action includes: use of home remedies and consult relatives, friends, etc.

^cNo action (wait until it goes away).

Recognizing the differences in symptoms and the question asked, these findings are somewhat inconsistent with the findings reported earlier for adults. There the tendency was more toward the use of professional services for a wide variety of symptoms. These findings, however, are consistent with our findings reported elsewhere for the symptoms of children.¹⁰

Children's Dental Care

The data presented earlier for adults (husband and wife) showed that a majority of them have not been to a dentist for five or more years, and that a very high proportion of them see a dentist, if at all, for symptomatic (dental problems) rather than preventive care. It was also evident that the primary barriers to receiving dental care are lack of financial resources (cannot pay the dentist), lack of transportation and non-availability of the dentist. Only a few of them indicated that they did not go to a dentist because of the fear of being hurt. Other studies show that the use of dental care is positively related to socio-economic status. Moreover, low income families are less likely than high income families to participate in preventive dental care.¹¹

The findings on children's dental care show that many families report that their children have dental problems, a majority of the children have never been to a dentist, and a high proportion of them receive only symptomatic dental care.

The data on children's dental problems are reported in Table 61. Approximately 38 per cent of the families report that their child(ren) have toothaches, 60.7 per cent cavities, 25.1 per cent generally bad teeth and 14.2 per cent missing teeth.¹²

TABLE 61
SPECIFIC CHILDREN'S DENTAL PROBLEMS REPORTED BY FAMILIES WHO HAD
CHILDREN 18 YEARS OF AGE OR YOUNGER

Dental Problems	Frequency	Per cent	N
Toothaches	70	38.3	183
Cavities	111	60.7	183
Generally bad teeth	46	25.1	183
Missing teeth	26	14.2	183

TABLE 62
LENGTH OF TIME SINCE MOST RECENT VISIT TO THE DENTIST BY CHILDREN
18 YEARS OF AGE OR YOUNGER

Time since last visit	Frequency	Per cent
1 year ago (during 1968)	138	31.5
2 years ago (during 1967)	46	10.5
3 years ago (during 1966)	15	3.4
4 years ago (during 1965)	9	2.0
5 or more years ago	9	2.0
Have never seen a dentist ^a	220	50.6
Total	437	100.0

^a89 children no information, 64 children too young to go to a dentist.

The data on the most recent visit to the dentist by children are presented in Table 62. Approximately one-third of those children for whom the information is available saw a dentist during the year prior to the study year.¹³ At the other extreme, a little over 50 per cent of the children have never been to a dentist.

We noted earlier that those from the low socio-economic group are most likely to see a dentist (if they visit a dentist at all) for symptomatic reasons. The findings from this study (Table 63) show that of those who have been to a dentist, the most recent visit of 77 per cent was for symptomatic reasons.

Additional data show that children do not have any regular pattern of visit to a dentist. The respondents were asked: "How often do your children generally see a dentist?" Table 64 shows that two-thirds reported that their children see a dentist "only when absolutely necessary," and a little over 10 per cent of the families reported "never." Only a few of the families indicate that their children see a dentist regularly.

The data reported in Chapter I show that over 90 per cent of the families indicate that the children should see a dentist one or more times a year. However, their "positive" attitudes toward dental care or their children's dental care needs are not reflected in the actual use of these services. Our findings have shown consistently that financial considerations are the primary reasons for these families not receiving adequate care. Dental care is no exception.¹⁴ The removal of this barrier may bring a closer correspondence between their attitudes (desirability of preventive dental care) or "needs" and their actions (actual use of these

TABLE 63
 DISTRIBUTION OF REASONS FOR MOST RECENT VISIT TO THE DENTIST BY
 CHILDREN
 (Those who have been to a dentist, N = 217)

Reasons	Frequency	Per cent
Symptomatic (dental problem)	167	77.0
Preventive (routine dental care)	50	23.0
Total	217	100.0

TABLE 64
 GENERAL PATTERN OF CHILDREN'S VISITS TO THE DENTIST BY FAMILIES
 (Families who had children 18 years of age or younger, N = 183)

Frequency of visits	Frequency	Per cent
Only when absolutely necessary	121	66.1
Once a year	20	10.9
More than once a year	11	6.0
Never	19	10.4
No information	12	6.6
Total	183	100.0

services).

Summary

In this chapter findings are reported on children's health care. The areas covered are: physician's services, routine-preventive care, immunization of children, various health-screening examinations, and children's dental care.

Approximately 45 per cent of the families with children 18 years of age or younger reported that it is not "convenient" for them to take their child(ren) to a physician, primarily due to financial considerations and lack of personal transportation. These findings are consistent with the data reported for adults. Monetary cost is a major obstacle to these families in procuring health services for their children. This is reflected both in their inability to take their children to a doctor or a dentist and prescription expenses. To solve this problem it is necessary not only to remove financial barriers to health care, but also to deal with other problems which prevent these families from taking advantage of medical services, even if such services were to be available to them. For instance, even if all medical services were to be free, transportation problems and the money to pay to a baby sitter for other children would be important barriers to these families in obtaining these services.

Regarding preventive care, a majority of the families report that their children do not receive preventive checkups regularly, primarily due to financial considerations, lack of transportation, no one to take care of other children, non-availability of the physician and their inability to take children to a physician

during certain hours. However, a few of them also stated that their children "don't need" regular checkups. Our findings also show that approximately 16 per cent of the children have never had a medical examination.

One of the most important areas of preventive care for children is immunization. Our findings indicate that many of the children have not received these shots which are considered essential for children's health. The same is true of other diagnostic tests, such as, x-ray, hearing tests and vision tests. We recognize, however, that various immunizations and tests are, to a great extent, a function of the children's ages. This would be particularly true of immunizations, since many of these shots are generally given before age two. In addition, the age at which a child receives inoculations is determined by the schedule set up by a physician for that particular child. Despite these reservations the proportion of children who have not had inoculations and diagnostic tests is still high.

The data on initial reactions to various illness symptoms of children show that there is a tendency to take "non-medical" and "no action" first for "minor" symptoms and a tendency to take "medical action" for more "severe" symptoms.

Regarding children's dental care, many families report that their children have dental problems, a majority of the children have never been to a dentist, and a high proportion of them receive symptomatic rather than preventive dental care. It is quite apparent that the children do not receive adequate dental care, despite the need for such care as is reflected in children's dental problems.

FOOTNOTES CHAPTER IV

¹U.S. Department of Health, Education and Welfare, "Physician Visits: Interval of Visits and Children's Routine Check-up," Vital and Health Statistics, Series 10, Number 19, 1965, p. 10.

²Ibid., p. 12.

³Ibid., p. 11, (Figure 11).

⁴It must be noted that only 24 children were under one year of age.

⁵When the families were asked if their children have ever been examined by a doctor or nurse at school, approximately 84 per cent of the families who had school age children responded affirmatively (Appendix A, Table A-39).

We also asked the respondents if their children participate in various food programs in school. Of those who had school age children 53 per cent said that their children participate in school lunch program, 48.8 per cent school milk program and less than one per cent in school breakfast program (Appendix A, Tables A-37).

⁶Our data reported earlier showed that a little over 16 per cent of the children have never had a medical examination of any sort. In the present case 37.2 per cent of children have never had a physical examination. It is likely that the respondents do make a distinction between a medical examination and a physical examination.

⁷The respondents were asked: "In general, what was the reason for the last time your children had the following (a chest x-ray, a hearing test, a vision test, a physical examination). Therefore, the data were collected by families rather than by children (Appendix A, Table A-40).

⁸For children's age distribution see Appendix A, Table A-41.

⁹It may be noted here regarding the symptom of running ear, during the interview respondents were asked: "Do you think any permanent harm can result when a child has an earache or draining ears?" Over 98 per cent responded affirmatively.

¹⁰Robert A. Bendiksen and Bhopinder S. Bolaria, Social Correlates of Expected Solutions to Selected Illness Symptoms of Children, A publication of Maine's Regional Medical Program Research and Evaluation Service, July 1970.

¹¹See particularly, U.S. Department of Health, Education and Welfare, "Dental Visits, Time Interval Since Last Visit: United States, July 1963-June 1964," Vital and Health Statistics, Series 10, No. 29, 1966. See also our other publications, Allan A. Spencer

and Bhopinder S. Bolaria, Social Correlates of the Utilization of Medical Services, and George Heming and Bhopinder S. Bolaria, Social Correlates of the Utilization of Selected Health-Care Services: A Study of Fifteen Communities, Publications of Maine's Regional Medical Program Research and Evaluation Service, July and August, 1970

¹²This may not be the most accurate way to determine the extent of children's dental problems. The respondents were asked: "Do any of your children presently have any of the following dental problems?" The response categories were: toothaches, cavities, generally bad teeth, missing teeth, and no dental problems presently. Since no family reported in the last category it is reasonable to state that in every family a child or children had at least one of the listed problem(s).

¹³The data on frequency of visits to the dentist during this time period indicate that 68.8 per cent saw a dentist once, 16.7 per cent twice and 14.5 per cent three or more times (Appendix A, Table A-42).

¹⁴When families were asked: "Does lack of money ever keep you from taking your children to a doctor or a dentist?" 66 per cent responded affirmatively. To a somewhat similar question on cost of prescriptions, 44 per cent responded affirmatively (See Table 53).

CHAPTER V

SUMMARY AND CONCLUSIONS

The findings reported here are based upon a study of low-income families. Data were collected by household interviews and the questions on health-care pertaining to all members of the family were directed to an adult member who was expected to know the most about family use of health services. In this manner, though interviews were conducted with 301 respondents, a varying degree of information was collected on 1038 individuals. The use of household interviews by means of which questions on health information pertaining to all members of the household are addressed to one of its members, is most commonly used in studies of this nature.

Before presenting the implication of our analysis, it may be instructive to recapitulate briefly our findings. Our findings show that a majority of the families have various health or medical problems which need immediate attention. These problems ranged from dental care and chronic medical conditions to inadequate physical and sanitary conditions, such as toilet facilities, clothing, inadequate heat and water supply. The data on activity-limiting symptoms and conditions show that the adults have a multiplicity of these symptoms and conditions. Not only do these families have numerous illnesses, but they also lack access to medical services and facilities. Our findings show that both the adults and children have a rather low utilization of various services and facilities. Many of these families use folk-medicines and remedies for health

care.

Our findings on dental care and services are consistent with findings on the utilization of other health-care services. A majority of the adults have not been to a dentist for 5 years, a majority of the children have never been to a dentist and a very high proportion of adults and children see a dentist, if at all, for symptomatic rather than preventive care. It is quite apparent that the children do not receive dental care, despite the need for such care as is reflected in children's dental problems.

What are the reasons for lack of access by these families to medical services and facilities? Our findings show that lack of financial resources is the primary reason reported for lack of accessibility to physician's services and for "unmet" medical care needs. The other reasons appear to be the by-product of financial problems; for example, their inability to afford transportation, to pay a baby-sitter for children, and to pay for the cost of prescriptions. Other reasons for lack of accessibility to a physician are related to the non-availability of the physician and respondents' inability to see the physician during certain hours. The cost of medical services may also be a factor in these families' use of home-remedies and patent medicines for their health care. From our data on dental care, it is quite evident that the primary barriers to receiving dental care are lack of finances (cannot pay the dentist), lack of transportation and non-availability of the dentist. Therefore, there is a consistent support in our findings for the conclusion that the major barrier to receiving health care for these families is lack of financial resources.

Socio-economic status is related to health and illness behavior patterns both directly and indirectly. For example, there is substantial evidence which supports the conclusion that lower socio-economic status is associated with lower utilization level of preventive and other medical services under the fee-for-service system. Indirectly, socio-economic status is an important variable in accounting for varying response to illness, as it is associated with values, knowledge and attitudes toward health and disease.

The association between health attitudes and utilization of health services needs further comment here. One of the factors which might influence a person's decision to seek care is his attitudes toward personal health and health care. The lower classes, it is often maintained, are more skeptical of the value of routine preventive care, early consultation and treatment, and these attitudes subsequently interfere with their receipt of medical care in time. In this context, our findings show that the respondents generally express "positive" attitudes toward routine-preventive care and recognize the importance and desirability of routine visits to a physician and a dentist and preventive health checkups. However, our data on the actual use of routine-preventive care show that these families have a rather low utilization of such services primarily due to financial considerations and non-availability of and inaccessibility to various medical facilities. These factors prevent these families from using services even when they consider these services as highly important and desirable. Removal of these barriers may bring a closer correspondence between their attitudes (importance and desirability of preventive care) and their actions (actual utilization of such services).

Important as it is, the sheer removal of the financial barrier in itself may not fully solve the problem for low income families. One must consider other factors which prevent these families from using medical services, even if such services were to be available to them. For instance, even if all the medical services were to be free, the transportation problems and the money to pay someone to take care of children at home, and even the cost of prescriptions would be important factors to be taken into account before these families could fully utilize these services.

Furthermore, low income families face additional problems. Our findings show that the adults in our sample have a multiplicity of activity-limiting symptoms and conditions. These illness episodes take on added significance when they interfere with adults' daily activity and their employment. Consequently, due to these conditions they might be unable to assume "gainful" and steady employment and are destined to stay in perpetual poverty conditions. This in turn affects their ability to use health services. The low income families are caught in a vicious cycle: they are poor because they are sick and they are sick because they are poor.

Poverty also affects health in other ways. For instance, our findings on families' health and medical problems show that these families live in inadequate physical and sanitary conditions, such as, inadequate toilet facilities, clothing, inadequate heat and water supply. Consequently, to alleviate their medical problems one must also pay attention to their living conditions, as these problems may be a by-product of their impoverished physical and sanitary conditions.

Low-income families, therefore, face a multitude of health and health-related problems. These problems are further accentuated by the present health-care-system. The combination of high cost for medical care, inequitable distribution of health personnel and facilities, and a loosely integrated system of health care, has perpetuated ill health particularly among the poor and especially the rural poor. It is well recognized that the fee-for-service system of health-care delivery is not conducive to preventive health care. Those from lower classes are less likely than those from upper classes (if they can pay the price) to use preventive health-care. Even in many critical areas where preventive care is otherwise considered important, these families are unable to procure these services. One cannot help but agree with the National Advisory Commission on Health Manpower, that "unless we improve the system through which health care is provided, care would continue to become less satisfactory. . ."

The differential access to medical services and facilities due to economic reasons is further accentuated when combined with inequitable distribution of health personnel and facilities. The problem is more severe for the rural poor as the health facilities, costly as they may be, are largely inaccessible to them. Almost twice as many people are poor in rural areas of this country as in urban areas, and most of the rural areas are under-doctored. Regarding Maine, only Cumberland County has less than 20 per cent of its families with income under \$3,000. In other counties these figures range from 20.2 per cent in Penobscot County to a high of 28.8 per cent in Washington County.¹ In more isolated rural areas of Maine, low-

income families are likely to receive even less adequate care.

A very high proportion of the families appear to be receptive to proposed services and facilities, such as health-screening programs and community health centers or clinics. Regarding attitudes toward receiving health-information, the respondents attach more importance to information of how to obtain additional care and assistance than information in any other area. It may be that they do not consider the information in other areas of much utility to them and the question of how to obtain additional medical care and assistance is at the forefront of their minds. This is not surprising when one considers the numerous illness episodes and the state of medical deprivation of these families.

FOOTNOTES CHAPTER V

¹Poverty in Maine, Third Edition, Maine Office of Economic Opportunity, prepared by ARCO, Inc., 1968

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APPENDIX A
SUPPLEMENTARY TABLES

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TABLE A-1
LENGTH OF TIME IN THIS TOWN
N = 301

Length of Time in Town	Frequency	Per cent
Less than one year	13	4.3
One to five years	61	20.3
Six to ten years	25	8.3
Eleven to nineteen years	37	12.3
Twenty to thirty years	65	21.6
More than thirty years	100	33.2
Total	301	100.0

TABLE A-2
LENGTH OF TIME IN THE PRESENT HOUSE
N = 301

Length of Time in House	Frequency	Per cent
Less than one year	36	12.0
One to five years	127	42.2
Six to ten years	32	10.6
Eleven to nineteen years	41	13.6
Twenty to thirty years	31	10.3
More than thirty years	34	11.3
Total	301	100.0

TABLE A-3
SEX OF THE RESPONDENTS (INTERVIEWS)
N = 301

Sex	Frequency	Per cent
Male	50	16.6
Female	250	83.1
No information	1	0.3
Total	301	100.0

TABLE A-4

MARITAL STATUS OF THE RESPONDENTS (INTERVIEWS)

N = 301

Marital Status	Frequency	Per cent
Single	17	5.6
Married	111	36.9
Divorced	74	24.6
Separated	21	7.0
Deserted	1	0.3
Widowed	77	25.6
Total	301	100.0

TABLE A-5

AGE DISTRIBUTION BY HUSBAND AND WIFE

Age	Wife		Husband	
	F	%	F	%
24 years and under	28	10.2	6	4.4
25-29 years	40	14.4	12	8.9
30-34 years	33	11.9	17	12.6
35-39 years	30	10.9	10	7.4
40-44 years	20	7.2	11	8.1
45-49 years	21	7.6	6	4.4
50-55 years	18	6.5	10	7.4
56-59 years	9	3.2	12	8.9
60-64 years	13	4.7	19	14.1
65-70 years	24	8.7	10	7.4
70-74 years	15	5.4	8	5.9
75 years and over	22	7.9	12	8.9
No information	4	1.4	2	1.6
Total	277	100.0	135	100.0

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TABLE A-6

CURRENT EMPLOYMENT STATUS BY HUSBAND AND WIFE

Employment Status	Wife		Husband	
	F	%	F	%
Employed	43	15.5	65	48.1
Unemployed (Housewives)	232	83.8	70	51.9
No information	2	0.7	0	0.0
Total	277	100.0	135	100.0

TABLE A-7

CURRENT SPECIFIC OCCUPATION BY HUSBAND AND WIFE

Specific Occupation	Wife		Husband	
	F	%	F	%
Professional and technical	0	0.0	1	0.7
Farmers and farm managers	0	0.0	0	0.0
Managers and officials-- except farm	0	0.0	1	0.7
Clerical	4	1.4	1	0.7
Sales	2	0.7	1	0.7
Craftsman-skilled	0	0.0	2	1.5
Operative-semi-skilled	3	1.1	10	7.4
Private household workers	2	0.7	1	0.7
Service workers--except household	8	2.9	4	3.0
Farm laborers and foremen	0	0.0	0	0.0
Laborers--except farm & mine	23	8.3	36	26.8
Housewife	232	83.3	0	0.0
Not employed	0	0.0	70	51.9
No information	3	1.1	8	5.9
Total	177	100.0	135	100.0

TABLE A-8
EDUCATIONAL LEVEL BY HUSBAND AND WIFE

Educational Level	Wife		Husband	
	F	%	F	%
Grades 1-6	17	6.1	19	14.1
Grades 7-8	93	33.6	54	40.0
1-3 years of high school	118	42.7	38	28.1
4 years of high school	41	14.8	17	12.6
1-3 years of college	4	1.4	4	3.0
4 years of college	2	0.7	1	0.7
Advanced college degree	0	0.0	0	0.0
No information	2	0.7	2	1.5
Total	277	100.0	135	100.0

TABLE A-9
RELIGIOUS PREFERENCE AND AFFILIATION BY HUSBAND AND WIFE

Religious Preference	Wife		Husband	
	F	%	F	%
Protestant	195	70.4	80	59.3
Roman Catholic	21	7.6	9	6.7
Jewish	0	0.0	0	0.0
Other	5	1.8	1	0.7
Not a member of any religion	54	19.5	43	31.8
No information	2	0.7	2	1.5
Total	277	100.0	135	100.0

TABLE A-10
POSSESSION OF MEDICAL INSURANCE
N = 301

Do you Have Medical Insurance?	Frequency	Per cent
Yes	182	60.5
No	118	39.2
No information	1	0.3
Total	301	100.0

TABLE A-11
TYPE OF MEDICAL INSURANCE

Type of Medical Insurance	Frequency	Per cent	N
Blue Cross (Hospital)	74	40.7	182
Blue Shield (Doctors)	69	37.9	182
State Aid (AFDC, AD, etc.)	90	49.5	182
Commercial (Private) Insurance	10	5.5	182
Other (Social Security, Military)	29	15.9	182

TABLE A-12
SOURCES OF MEDICAL CARE EXPENSES

Sources of Funds	Frequency	Per cent	N
Savings	13	4.3	301
Borrow from bank	1	0.3	301
Borrow from loan company	1	0.3	301
Borrow from friends	7	2.3	301
Borrow from relatives	9	3.0	301
Cash from household funds	93	30.9	301
Medicare	98	32.6	301
Other medical plans	7	2.3	301
State help	98	32.6	301
Town help	16	5.3	301
Federal help	11	3.7	301
Insurance	42	14.0	301
Other	24	8.0	301
Don't know	16	5.3	301

TABLE A-13
RESPONDENTS' ATTITUDES TOWARD TALKING TO A NURSE ABOUT
CURRENT FAMILY HEALTH OR MEDICAL PROBLEMS
(Those who had problems N = 171)

Would you like to talk to a nurse?	Frequency	Per cent
Yes	51	29.8
No	119	69.6
No information	1	0.6
Total	171	100.0

TABLE A-14
DISTRIBUTION OF REASONS FOR NOT RECEIVING PHYSICIAN'S
CARE FOR AILMENTS BY HUSBAND AND WIFE

Reasons for Not Receiving Attention	Wife (N=26)		Husband (N=21)	
	F	%	F	%
Refused to go	2	7.7	4	19.0
No money or transportation	1	3.8	0	0.0
No money	17	65.6	12	57.1
Scared of doctors	1	3.8	1	4.8
Incompetent doctor	0	0.0	1	4.8
No time	1	3.8	0	0.0
Doesn't like doctors, treats self	1	3.8	0	0.0
Thought it would go away	2	7.7	1	4.8
Could not get doctor	1	3.8	0	0.0
No information	0	0.0	2	9.5
Total	26	100.0	21	100.0

TABLE A-15
DISTRIBUTION OF REASONS FOR NOT BEING HOSPITALIZED FOR
AILMENTS BY HUSBAND AND WIFE

Reason for Not Being Hospitalized	Wife (N=16)		Husband (N=10)	
	F	%	F	%
Financial problems	11	68.6	4	40.0
Could not leave work	1	6.3	2	20.0
No one to care for children	2	12.5	1	10.0
Did not want to go	1	6.3	1	10.0
No information	1	6.3	2	20.0
Total	16	100.0	10	100.0

TABLE A-16
DISTRIBUTION OF REASONS FOR NOT RECEIVING MEDICAL CARE
AFTER DOCTOR'S RECOMMENDATION BY HUSBAND AND WIFE

Reason for Not Receiving Medical Attention	Wife (N=33)		Husband (N=13)	
	F	%	F	%
Did not believe doctor	1	4.3	0	0.0
Insufficient funds	16	69.6	9	69.2
No transportation	3	13.0	3	23.1
Doctor's office hours inconvenient	2	8.7	1	7.7
Could not get appointment	3	13.0	0	0.0
Felt better eventually	3	13.0	2	15.4
Prescription too costly	6	26.1	6	46.2
Did not believe medicine would do any good	1	4.3	0	0.0
Other reasons ^a	9	21.7	1	7.7

^aIncludes such items as: "afraid" and "did not want to lose work."

TABLE A-17
DISTRIBUTION OF REASONS FOR NOT BEING HOSPITALIZED AFTER
DOCTOR'S RECOMMENDATION BY HUSBAND AND WIFE

Reason for Not Receiving Hospitalization	Wife (N=20)		Husband (N=11)	
	F	%	F	%
Did not believe the doctor	1	5.0	0	0.0
Could not miss work	1	5.0	1	9.1
Insufficient funds	10	50.0	8	72.1
Would rather not go in hospital	5	25.0	0	0.0
Nobody to care for children	6	30.0	0	0.0
Felt better eventually	3	15.0	1	9.1
Other ^a	2	10.0	1	9.1

^aIncludes such items as: "afraid" and "treated at home."

TABLE A-18
DISTRIBUTION OF FAMILIES WITH CURRENT HEALTH OR MEDICAL PROBLEMS
N = 301

Do You Have Family Health or Medical Problems?	Frequency	Per cent
Yes	171	56.8
No	130	43.2
Total	301	100.0

TABLE A-19
DISTANCE FROM FAMILY DOCTOR
(Those who had a family doctor N = 206)

Distance From Family Doctor	Frequency	Per cent
Less than 5 miles	140	53.7
5-9 miles	42	16.2
10-14 miles	27	10.4
15-19 miles	35	13.5
20-24 miles	9	3.5
25 miles or more	5	1.9
No information	2	0.8
Total	260	100.0

TABLE A-20
DISTANCE FROM THE NEAREST DOCTOR
N = 301

Distance From Nearest Doctor	Frequency	Per cent
Less than 5 miles	176	58.4
5-9 miles	47	15.6
10-14 miles	33	11.0
15-19 miles	33	11.0
20-24 miles	8	2.7
25 miles or more	2	0.7
Do not know	1	0.3
No information	1	0.3
Total	301	100.0

TABLE A-21
DISTANCE TO NEAREST HOSPITAL
N = 301

Distance to Nearest Hospital	Frequency	Per cent
Less than 5 miles	86	28.6
5-9 miles	54	17.9
10-14 miles	98	32.6
15-19 miles	49	16.3
20-24 miles	10	3.3
25 miles or more	3	1.0
No information	1	0.3
Total	301	100.0

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TABLE A-22

MOST RECENT VISIT TO A DOCTOR FOR ANY REASON BY HUSBAND AND WIFE

Time of Most Recent Visit to a Doctor	Wife		Husband	
	F	%	F	%
During the year of the study (1969)	171	62.0	74	55.2
1 year ago (during 1968)	46	16.7	16	11.9
2 years ago (during 1967)	22	8.0	12	9.0
3 years ago (during 1966)	10	3.6	6	4.5
4 years ago (during 1965)	7	2.5	6	4.5
5 or more years ago	20	7.2	16	11.9
Never	0	0.0	4	3.0
Total	276 ^a	100.0	134 ^b	100.0

^aOne no information.

^bOne response "don't know."

TABLE A-23

VISITS TO SPECIFIC MEDICAL PERSON DURING 1968 BY HUSBAND AND WIFE

Medical Person	Wife (N=277)		Husband (N=135)	
	F	%	F	%
General Practitioner	189	68.2	77	57.0
Cardiologist (heart	9	3.2	8	5.9
Cancer specialist	1	0.4	1	0.7
Neurologist (brain)	3	1.1	1	0.7
Bone specialist	1	0.4	3	2.2
Gynecologist	14	5.1	0	0.0
Obstetrician	11	4.0	0	0.0
Surgeon	8	2.9	4	3.0
Other specialist	7	2.6	0	0.0
Psychiatrist	5	1.8	0	0.0
Psychologist	2	0.7	0	0.0
Optometrist(eye)	53	19.1	12	8.9
Public health nurse	2	0.7	0	0.0
Chiropractor	7	2.5	1	0.7
Physical therapist	2	0.7	3	2.2
Inhalation therapist	3	1.1	0	0.0
Dietitian	3	1.1	0	0.0
Podiatrist	3	1.1	2	1.5

TABLE A-24
 VISITS TO SPECIFIC MEDICAL PERSONNEL BY CHILDREN OF ALL AGES
 DURING THE YEAR 1968
 N = 609

Specific Medical Person	Frequency	Per cent
General practitioner	237	38.9
Cardiologist (heart)	3	0.5
Neurologist (brain)	2	0.3
Bone specialist	3	0.3
Gynecologist	3	0.3
Dermatologist	1	0.2
Internist	1	0.2
Pediatrician	40	6.6
Surgeon	7	1.2
Other specialist	3	0.5
Psychiatrist	1	0.2
Optometrist	39	6.4
Public health nurse	13	2.1
Chiropractor	2	0.3
Physical therapist	1	0.2
Dietitian	1	0.2
Podiatrist	2	0.3

TABLE A-25

POSSESSION OF HOME REMEDIES AND PATENT MEDICINE

Home Remedies and Patent Medicines	Have		Don't have		No Information		N
	F	%	F	%	F	%	
Salves or ointments	243	80.7	58	19.3	--	--	301
Tonics	55	18.3	240	79.7	6	2.0	301
Purgatives	205	68.1	94	31.2	2	0.7	301
Liniments	173	57.5	124	41.2	4	1.3	301
Painkillers	285	94.7	13	4.3	3	1.0	301
Antiseptic	252	83.7	47	15.6	2	0.7	301
Sleeping pills	30	10.0	270	89.7	1	0.3	301
Vitamins	119	39.6	181	60.1	1	0.3	301
Stomach settlers	173	57.4	126	41.9	2	0.7	301
Cold remedies	225	74.8	75	24.9	1	0.3	301
Cough remedies	224	74.4	75	24.9	2	0.7	301
Piles or hemorrhoid remedies	59	19.6	240	79.7	2	0.7	301
Eye drops	76	25.3	224	74.4	1	0.3	301

TABLE A-26

DISTANCE FROM A DENTIST

N = 301

Distance From Dentist	Frequency	Per cent
Less than 5 miles	146	48.5
5-9 miles	43	14.3
10-14 miles	62	20.6
15-19 miles	38	12.6
20-24 miles	9	3.0
25 miles or more	2	0.7
No information	1	0.3
Total	301	100.0

TABLE A-27

NUMBER OF VISITS TO A DENTIST DURING THE YEAR PRIOR TO THE
INTERVIEW (1968) BY HUSBAND AND WIFE

(Those who saw a dentist during 1968)

Number of Visits	Wife		Husband	
	F	%	F	%
Once	27	51.9	10	52.6
Twice	14	26.9	5	26.3
Three or more times	11	21.2	4	21.1
Total	52	100.0	19	100.0

TABLE A-28

BIRTHS DURING 1968

N = 301

Was Any Child Born During 1968?	Frequency	Per cent
Yes	20	6.6
No	219	72.8
Single	17	5.6
No children	45	16.0
Total	301	100.0

TABLE A-29

ATTITUDES TOWARD HAVING MORE CHILDREN

N = 301

Do You Plan to Have More Children	Frequency	Per cent
Yes	20	6.7
No	259	86.1
Single	17	5.6
Don't know	1	0.3
No information	4	1.3
Total	301	100.0

TABLE A-30

WOULD YOU LIKE HELP IN FINDING OUT HOW OFTEN YOUR CHILDREN
SHOULD BE SEEN BY A DOCTOR, NURSE, OR DENTIST?

(Families with children 18 years of age or younger, N = 183)

Responses	Frequency	Per cent
Yes	65	35.5
No	114	62.3
No information	4	2.2
Total	183	100.0

TABLE A-31

WOULD A SPECIALLY-TRAINED NURSE BE ACCEPTABLE TO YOU TO CARE
FOR THOSE OF YOUR CHILDREN'S HEALTH PROBLEMS THAT DO NOT
REQUIRE A DOCTOR'S ATTENTION?

(Families with children 18 years of age or younger, N = 183)

Response	Frequency	Per cent
Yes	105	57.4
No	72	39.3
No information	6	3.3
Total	183	100.0

TABLE A-32

WOULD A SPECIALLY-TRAINED NURSE BE ACCEPTABLE TO YOU IF YOU
KNEW THAT SHE COULD DISCUSS YOUR CHILDREN'S HEALTH WITH A
DOCTOR AT ANY TIME AND THAT THE DOCTOR WOULD SEE THE
CHILDREN AT SCHEDULED TIMES WHEN WELL AND
AT ANY TIME WHEN SICK?

(Families with children 18 years of age or younger, N = 183)

Responses	Frequency	Per cent
Yes	130	71.0
No	48	26.2
No information	5	2.8
Total	183	100.0

TABLE A-33
SMOKING STATUS BY HUSBAND AND WIFE

Do You Smoke Cigarettes?	Wife		Husband	
	F	%	F	%
Yes	131	47.3	83	61.5
No	145	52.3	52	38.5
No information	1	0.4	--	----
Total	277	100.0	135	100.0

TABLE A-34
CHRONIC COUGH BY HUSBAND AND WIFE

Do You Have a Chronic Cough	Wife		Husband	
	F	%	F	%
Yes	24	8.6	22	16.3
No	252	91.0	113	83.7
No information	1	0.4	--	----
Total	277	100.0	135	100.0

TABLE A-35
EXPOSURE TO IRRITATING CHEMICALS OR AIR POLLUTANTS BY HUSBAND AND WIFE

Are You Exposed to Irritating Chemicals or Air Pollutants?	Wife		Husband	
	F	%	F	%
Yes	14	5.1	5	3.7
No	262	94.5	130	96.3
No information	1	0.4	--	----
Total	277	100.0	135	100.0

TABLE A-36
FAMILY'S SOURCE OF DRINKING WATER
N = 301

Sources	Frequency	Per cent
Own well water	129	42.9
Community water	124	41.9
Neighbor's well	18	6.0
Spring water	23	7.6
Other	7	2.3
Total	301	100.0

TABLE A-37
PARTICIPATION BY CHILDREN IN VARIOUS FOOD PROGRAMS IN
SCHOOLS BY FAMILIES
(Families who had school age children, N = 164)

Do your children participate. .	Those who responded affirmatively		
	Frequency	Per cent	N
School lunch program	87	53.0	164
School milk program	80	48.8	164
School breakfast program	1	0.6	164

TABLE A-38
DISTRIBUTION OF WIVES WHO PRACTICE SELF-BREAST EXAMINATION
AND WERE INSTRUCTED TO DO IT

Was Wife Instructed on How to Do Self-Breast Examination?	Frequency	Per cent
Yes	50	35.1
No	27	64.9
Total	77	100.0

TABLE A-39
 CHILDREN'S EXAMINATION BY A DOCTOR OR NURSE AT SCHOOL BY FAMILIES
 (Families who had school age children, N = 164)

Ever Been Examined By Doctor/ Nurse at School	Frequency	Per cent
Yes	136	84.1
No	26	15.9
Total	164	100.0

TABLE A-40
DISTRIBUTION OF REASONS FOR CHILDREN'S MOST RECENT X-RAY, HEARING TEST, VISION TEST
AND PHYSICAL EXAMINATION BY FAMILIES

Reasons	X-ray		Hearing test		Vision test		Physical exam.	
	F	%	F	%	F	%	F	%
Symptomatic	18	38.3	8	6.0	17	12.1	9	6.5
Preventive	26	55.3	121	91.0	120	85.1	125	90.6
No information	3	6.4	4	3.0	4	2.8	4	2.9
Total	47 ^a	100.0	133 ^b	100.0	141 ^c	100.0	138 ^d	100.0

^aOne hundred and eighteen families reported no children 18 years of age or younger, and 136 families indicated that their children did not have x-rays.

^bOne hundred and eighteen families reported no children 18 years of age or younger, and 136 families indicated that their children did not have hearing tests.

^cOne hundred and eighteen families reported no children 18 years of age or younger, and 50 families indicated that their children did not have vision tests.

^dOne hundred and eighteen families reported no children 18 years of age or younger, and 42 families indicated that their children did not have physical examinations.

TABLE A-41
AGE DISTRIBUTION OF CHILDREN 18 YEARS OF AGE OR YOUNGER
N = 590

Age Distribution	Frequency	Per cent
Less than 1 year	24	4.1
1 year	26	4.4
2-4 years	101	17.1
5-9 years	213	36.1
10-14 years	150	25.4
15-18 years	76	12.9
Total	590	100.0

TABLE A-42
NUMBER OF VISITS TO A DENTIST DURING THE YEAR PRIOR TO THE INTERVIEW
(1968) BY CHILDREN WHO SAW A DENTIST DURING 1968

Number of Visits	Frequency	Per cent
Once	95	68.8
Twice	23	16.7
Three or more times	20	14.5
Total	138	100.0

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APPENDIX B
DISTRIBUTION OF SELECTED MEDICAL
RESOURCES IN MAINE

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TABLE B-1
DISTRIBUTION OF ACTIVE PHYSICIANS (M.D.'s) IN THE STATE OF MAINE

County	Population ^a	Land Area (square miles) ^b	Number of M.D.'s ^c	Active M.D.'s/ Population Ratio ^d	Active M.D./Square Mile Ratio ^e
Androscoggin	89,500	478	89 (9)	1/1006	1/5
Aroostook	102,200	6805	53 (8)	1/1928	1/128
Cumberland	188,300	881	216 (35)	1/872	1/4
Franklin	20,700	1715	15 (1)	1/1380	1/114
Hancock	32,700	1542	37 (4)	1/884	1/42
Kennebec	90,900	865	116 (15)	1/784	1/7
Knox	29,400	362	30 (10)	1/980	1/12
Lincoln	19,200	457	11 (5)	1/1745	1/41
Oxford	43,500	2085	23 (10)	1/1891	1/91
Penobscot	126,500	3408	100 (11)	1/1265	1/34
Piscataquis	17,000	3948	10 (6)	1/1700	1/395
Sagadahoc	23,000	257	16 (4)	1/1438	1/16
Somerset	41,700	3922	22 (7)	1/1895	1/178
Waldo	22,900	734	4 (3)	1/5725	1/183
Washington	31,700	2553	14 (2)	1/2264	1/182
York	103,800	1000	57 (10)	1/1821	1/17
State	983,000	31,012	813 (140)	1/1209	1/38

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^aSource: The Maine Handbook--A Statistical Abstract, Maine Department of Economic Development, August, 1968.
p. 19. (Department of Health and Welfare Estimated for 1966).

^bSource: The Maine Handbook--A Statistical Abstract, op. cit., p. 116. Figures include land area only.
Maine also has 2203 square miles of water area.

^cSource: Maine Medical Association Official Roster, Supplement to the Journal of the Maine Medical Association, May 1, 1969. Figures indicate "Active M.D.'s; figures in parentheses indicate "honorary" "senior" "affiliate" "junior" or "Service" M.D.'s.

^dBased on "Active" M.D.'s only.

TABLE B-2
DISTRIBUTION OF ACTIVE PHYSICIANS (D.O.'s) IN THE STATE OF MAINE

County	Population ^a	Land Area (square miles) ^b	Number of D.O.'s ^c	Active D.O. Population Ratio ^d	Active D.O./ Square Mile Ratio ^e
Androscoggin	89,500	478	5 (2)	1/17,900	1/96
Aroostook	102,200	6805	5 (0)	1/20,400	1/1,361
Cumberland	188,300	881	66 (4)	1/2,853	1/13
Franklin	20,700	1715	3 (0)	1/6,900	1/572
Hancock	32,700	1542	6 (1)	1/5,450	1/257
Kennebec	90,900	865	8 (1)	1/11,363	1/108
Knox	29,400	362	6 (2)	1/4,900	1/60
Lincoln	19,200	457	4 (1)	1/4,800	1/114
Oxford	43,500	2085	7 (0)	1/6214	1/298
Penobscot	126,500	3408	14 (0)	1/9036	1/243
Piscataquis	17,000	3908	3 (0)	1/5667	1/1316
Sagadahoc	23,000	257	2 (0)	1/11,500	1/128
Somerset	41,700	3922	7 (2)	1/5957	1/560
Waldo	22,900	734	3 (0)	1/7633	1/245
Washington	31,700	2553	2 (1)	1/15,850	1/1276
York	103,800	1000	21 (2)	1/4943	1/48
State	983,000	31,012	162 (16)	1/6068	1/191

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^a Source: The Maine Handbook--A Statistical Abstract, Maine Department of Economic Development, August, 1968.
p. 19. (Department of Health and Welfare Estimates for 1966).

^b Source: The Maine Handbook--A Statistical Abstract, op. cit., p. 116. Figures include land area only.
Maine also has 2203 square miles of water area.

^c Source: Maine Osteopathic Association, Directory, (Mimeo) August 1968, Figures indicate "Active"
D.P.'s; figures in parentheses indicate "retired" D.O.'s.

^d Based on "Active" D.O.'s only.

^e Based on "Active" D.O.'s and land area only.

TABLE B-3

DISTRIBUTION OF PHYSICIANS (M.D.'s, D.O.'s) IN THE STATE OF MAINE (BY POPULATION)

County	Population ^a	Total MD's (active & other) ^b	Total DO's (active/other) ^c	All MD's & DO's (active/other)	All doctors/ Population ratio	Total Active Physicians	All active doctors/ Population Ratio
Androscoggin	89,500	98	7	105	1/852	94	1/952
Aroostook	102,200	61	5	66	1/1548	58	1/1762
Cumberland	188,300	251	70	321	1/587	282	1/668
Franklin	20,700	16	3	19	1/1089	18	1/1150
Hancock	32,700	41	7	48	1/681	43	1/733
Kennebec	90,900	131	9	140	1/649	124	1/733
Knox	29,400	40	8	48	1/613	36	1/817
Lincoln	19,200	16	5	21	1/914	15	1/1280
Oxford	43,500	33	7	40	1/1088	30	1/1450
Penobscot	126,500	111	14	125	1/1012	114	1/1110
Piscataquis	17,000	16	3	19	1/895	13	1/1308
Sagadahoc	23,000	20	2	22	1/1045	18	1/1278
Somerset	41,700	29	9	38	1/1097	29	1/1438
Walco	22,900	7	3	10	1/2290	7	1/3271
Washington	31,700	16	3	19	1/1668	16	1/1981
York	103,800	67	23	90	1/1153	78	1/1331
State	983,000	953	178	1131	1/869	975	1/1008

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^aSource: The Maine Handbook--A Statistical Abstract, Maine Department of Economic Development, August, 1968.
p. 19. (Department of Health and Welfare Estimates for 1966).

^bSource: Maine Medical Association Official Roster, Supplement to the Journal of Maine Medical Association, May 1, 1969.

^cSource: Maine Osteopathic Association Directory (Mimeo), August, 1968.

TABLE B-4
DISTRIBUTION OF PHYSICIANS (M.D.'S & D.O.'S) IN THE STATE OF MAINE (BY LAND AREA)

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County	Land Area (square miles) ^a	All Active ^b		All active doctors/ Physicians	Total Physicians		All Physicians square mile ratio
		MD's	DO's		Active	Active & other	
Androscoggin	478	89	5	94	1/5	105	1/5
Aroostook	6805	53	5	58	1/117	66	1/103
Cumberland	881	216	66	282	1/3	321	1/3
Franklin	1715	15	3	18	1/95	19	1/90
Hancock	1542	37	6	43	1/36	48	1/32
Kennebec	865	116	8	124	1/7	140	1/6
Knox	362	30	6	36	1/10	48	1/8
Lincoln	457	11	4	15	1/31	21	1/22
Oxford	2085	23	7	30	1/70	40	1/52
Penobscot	3408	100	14	114	1/30	125	1/27
Piscataquis	3948	10	3	13	1/304	19	1/208
Sagadahoc	257	16	2	18	1/14	22	1/12
Somerset	3922	22	7	29	1/135	38	1/103
Waldo	734	4	3	7	1/105	10	1/73
Washington	2553	14	2	16	1/160	19	1/134
York	1000	57	21	78	1/13	90	1/11
State	31,012	813	162	975	1/32	1131	1/27

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^aSource: The Maine Handbook--A Statistical Abstract, Maine Department of Economic Development, August, 1968. p. 116, Figures include land area only. Maine also has 2203 square miles of water area.

^bSource: Maine Medical Association Official Roster, Supplement to the Journal of the Maine Medical Association, May 1, 1969.

^cSource: Maine Osteopathic Association, Directory, (Mimeo) August, 1968

TABLE B-5
HOSPITAL DISTRIBUTION IN THE STATE OF MAINE

County	Population ^a	Land Area (square miles) ^b	Number of Hospitals ^c	Hospital Size ^d	Bed/Population Ratio	Special Hospitals and Size ^e
Androscoggin	89,500	478	2	499	1/179	
Aroostook	102,200	6805	9	472	1/217	
Cumberland	188,300	881	9	1102	1/171	Loring, A.F.B. Hospital(30) Brunswick N.A.S. Hosp. (31) Pineland (819)
Franklin	20,700	1715	1	50	1/414	
Hancock	32,700	1542	4	170	1/192	
Kennebec	90,900	965	5	554	1/164	Augusta State (1721) V.A.Togus (909)
Knox	29,400	362	2	120	1/245	
Lincoln	19,200	457	2	78	1/246	
Oxford	43,500	2085	8	138	1/315	
Penobscot	126,500	3408	8	715	1/177	Bangor State (1200)
Piscataquis	17,000	3948	3	78	1/218	
Sagadahoc	23,000	257	1	96	1/240	
Somerset	41,700	3922	5	172	1/242	Central Maine San- atorium (88)
Waldo	22,900	734	1	60	1/382	
Washington	31,700	2553	3	140	1/226	
York	103,800	1000	6	352	1/295	
State	983,000	31,012	63	4796	1/205	7 Total beds 4798

^a Source: The Maine Handbook--A Statistical Abstract, Maine Department of Economic Development, Augusta, 1968.
p. 19. (Department of Health and Welfare Estimates for 1966).

^b Source: The Maine Handbook--A Statistical Abstract, op. cit., p. 116. Figures include land area only. Maine also has 2203 square miles of water area.

^c Source: Directory of Maine Hospitals and Schools of Nursing, Maine Hospital Association, October, 1968.

^d Source: See Footnote c.

TABLE B-6
NURSING HOME DISTRIBUTION IN THE STATE OF MAINE

County	Population 65 and Over ^a	Number of Nursing Homes ^b	Number of Beds in Nursing Homes ^c	Beds in Nursing home/population 65 and over ratio
Androscoggin	9,834	17	736	1/13
Aroostook	7,596	11	187	1/41
Cumberland	2,710	29	699	1/30
Franklin	2,274	5	75	1/30
Hancock	4,260	7	165	1/26
Kennebec	10,694	23	583	1/18
Knox	4,233	5	85	1/50
Lincoln	2,592	7	117	1/22
Oxford	5,196	9	245	1/21
Penobscot	12,375	16	435	1/29
Piscataquis	2,262	6	88	1/26
Sagadahoc	2,750	6	98	1/28
Somerset	4,527	9	208	1/22
Waldo	2,666	5	120	1/22
Washington	4,289	8	168	1/26
York	11,604	18	450	1/26
State	108,062	181	4459	1/24

^aSource: The Maine Handbook - A Statistical Abstract, op. cit., p. 19.

^bSource: Maine Licensed Hospitals and Related Institutions Directory, Maine Department of Health and Welfare, Division of Hospital Services, July, 1966

^cSource: See Footnote b.

APPENDIX C-QUESTIONNAIRE

COMMUNITY ACTION PROGRAM STUDY

The purpose of this survey is to determine some of the health needs of recipients of the Food Surplus Program. Questions concerning the availability and use of health services, physicians, hospitals, clinical services, and general health questions will be asked about you and your family.

This information will be helpful in planning future medical care programs. Our interest is in assisting your community in developing methods to assure you and your family the best medical care possible.

Your help is necessary for the success of this study but is entirely voluntary. All information will be kept strictly confidential.

We greatly appreciate your cooperation.

Bhopinder S. Bolaria, Ph. D.	Merrymeeting Community
Director, Maine's Regional Medical Program	Action, Inc.
Research and Evaluation Service	Bath, Maine

The contents of this questionnaire are in no way the responsibility of the United States Public Health Service.

SECTION I

BACKGROUND INFORMATION

We would like some information about yourself and your family.

1. How long have you lived in this house? _____
(years)
2. How long have you lived in this town? _____
(years)
3. Marital status:
____ single ____ married ____ divorced ____ separated ____ deserted ____ widowed
4. How many children do you have?
____ number of children ____ no children ____ single
5. Was any child born during 1968?
____ yes ____ no ____ no children ____ single
6. Do you plan to have more children? ____ yes ____ no ____ single
7. How many people are presently living in your household, including yourself? ____

Please list all the people who live in this household. Let's begin with yourself,---husband, and eldest child first,---then others (under "person" indicate the relationship: eg. son, daughter, Aunt, Uncle, Grandparent, etc.)

PERSON	SEX OF EACH PERSON	AGE OF EACH PERSON IN THE HOUSEHOLD (MONTHS FOR BABIES)	PRESENT STATE OF HEALTH OF EACH PERSON --(1) excellent (2) good (3) fair (4) poor
Wife			
Husband			
(Eldest Child)			
1			
2			
3			
4			
5			
6			

8. How many children, 18 years of age or younger, are presently, living in your household?
____ number of children, 18 or younger ____ no children 18 or younger
9. Person being interviewed: ____ wife ____ husband
____ other (specify) _____

SECTION II

HEALTH AND MEDICAL SERVICES

Now we would like to know about your health and about the medical services available to you and your family.

1. Do you have a family doctor? ☐ yes ☐ no
2. How far do you have to travel to see your family doctor?
(Check only one response.)

1 <input type="checkbox"/> less than 5 miles	4 <input type="checkbox"/> 15 to 19 miles
2 <input type="checkbox"/> 5 to 9 miles	5 <input type="checkbox"/> 20 to 24 miles
3 <input type="checkbox"/> 10 to 14 miles	6 <input type="checkbox"/> 25 miles and over
	7 <input type="checkbox"/> no family doctor
3. How far do you have to travel to see the nearest doctor? (Check only one response.)

1 <input type="checkbox"/> less than 5 miles	4 <input type="checkbox"/> 15 to 19 miles
2 <input type="checkbox"/> 5 to 9 miles	5 <input type="checkbox"/> 20 to 24 miles
3 <input type="checkbox"/> 10 to 14 miles	6 <input type="checkbox"/> 25 miles or over
4. Is it difficult for your family to see a doctor? ☐ yes ☐ no
If yes, Why? (Check all that apply)

1 <input type="checkbox"/> unable to pay the doctor
2 <input type="checkbox"/> no transportation
3 <input type="checkbox"/> doctor's office hours are inconvenient
4 <input type="checkbox"/> cannot get an appointment
5 <input type="checkbox"/> afraid the doctor might find something seriously wrong with you
6 <input type="checkbox"/> no difficulty in seeing a doctor
7 <input type="checkbox"/> other: (specify) _____
5. How far do you have to travel to the nearest hospital? (check only one response)

1 <input type="checkbox"/> less than 5 miles	4 <input type="checkbox"/> 15 to 19 miles
2 <input type="checkbox"/> 5 to 9 miles	5 <input type="checkbox"/> 20 to 24 miles
3 <input type="checkbox"/> 10 to 14 miles	6 <input type="checkbox"/> 25 miles or over
6. Is there a particular medical person or clinic you or any family member go to when you are sick or when you want advice about health?

Person	Yes	No	If yes, medical person or clinic (category only)
Wife			
Husband			
Eldest Child			
2			
3			
4			
5			
6			

7. In your opinion how adequate is the medical care available to you and your family? (Check only one response)

- 1 does not exist (services and facilities are not available)
 2 available but not adequate
 3 exists in community but not available to my family. Why not?
 (specify) _____
 4 available for minor illnesses but not for complicated or
 emergency situations
 5 available only as emergency care
 6 both available and adequate

8. Do you think medical services are available and adequate in this community in case of: (Answer each question either yes or no)

- | | | | |
|--------------------|------------------|--------------|----------------------|
| | <u>Available</u> | | |
| 1. A stroke? | <u> </u> yes | <u> </u> no | <u> </u> don't know |
| 2. Cancer? | <u> </u> yes | <u> </u> no | <u> </u> don't know |
| 3. Heart disease? | <u> </u> yes | <u> </u> no | <u> </u> don't know |
| 4. A heart attack? | <u> </u> yes | <u> </u> no | <u> </u> don't know |
| | <u>Adequate</u> | | |
| 1. A stroke? | <u> </u> yes | <u> </u> no | <u> </u> don't know |
| 2. Cancer? | <u> </u> yes | <u> </u> no | <u> </u> don't know |
| 3. Heart disease? | <u> </u> yes | <u> </u> no | <u> </u> don't know |
| 4. A heart attack? | <u> </u> yes | <u> </u> no | <u> </u> don't know |

9. What do you do first when you need medical attention? (Check only one response)

- 1 call a doctor
 2 go to a hospital
 3 go to a clinic
 4 go to a drugstore
 5 call a nurse
 6 consult a friend or neighbor
 7 other: (specify) _____

10. When do you or any family member go to a doctor? (Check only one response)

- 1 only when you think you are sick
 2 at least once a year
 3 at least twice a year
 4 more than three times a year
 5 other: (specify) _____

11. If you or any family member are sick, when do you contact a physician (Check all that apply)

- 1 when you have a pain
 2 when you have a fever
 3 when you have the money to pay him
 4 when someone tells you that you should
 5 when you first feel poorly (health)
 6 other: (specify) _____

12. How often do you think one should see a doctor? (Check only one response)

- 1 at least once a year for a physical examination
 2 only when one is sick
 3 at least twice a year
 4 three or more times a year
 5 other: (specify) _____

13. Do you see a doctor only when you are sick or hurt? yes no

14. Do you feel that regular health checkups are important?
 yes no

15. Do you and your spouse have regular health checkups, even when you are well? (Check only one response for each.)

Wife _____ Husband _____

yes _____

no _____

does not apply _____

If no, why not? Wife (specify) _____

If no, why not? Husband (specify) _____

16. When did you or your spouse last see a doctor for a complete physical examination? (Check only one response for each person. Check "does not apply" if information is unavailable.)

	Wife	Husband
1. This year (1968)	_____	_____
2. Last year (1968)	_____	_____
3. Two years ago (1967)	_____	_____
4. Three years ago (1966)	_____	_____
5. Four years ago (1965)	_____	_____
6. Five years ago or more (1964 or before)	_____	_____
7. Never	_____	_____
8. Don't know	_____	_____
9. Does not apply	_____	_____

17. What was the reason for the last complete physical examination? (Check "Does not apply" if information is unavailable. Check only one response for each person.)

Wife	Husband
Symptom of illness _____	_____
Preventive (routine checkup) _____	_____
Never had physical exam _____	_____
Does not apply _____	_____

18. How long ago did you or your spouse have a chest x-ray? (check "does not apply" if information is unavailable.)

Wife	Husband
Approximate date of last chest x-ray _____	_____
No chest x-ray _____	_____
Does not apply _____	_____

19. When did you or your spouse last see a doctor for any reason? (Check one response for each person. Check "does not apply" if information is unavailable.)

	Wife	Husband
1. This year (1969)	_____	_____
2. Last year (1968)	_____	_____
3. Two years ago (1967)	_____	_____
4. Three years ago (1966)	_____	_____
5. Four years ago (1965)	_____	_____
6. Five or more years ago (1964 or before)	_____	_____
7. Never	_____	_____
8. Does not apply	_____	_____

20. Were you or any member of your family hospitalized during 1968?

☐ yes ☐ no

If yes, list only those who were hospitalized during 1968.

Family Position	Who Hospitalized	How Long?
Wife		
Husband		
Eldest Child		
1		
2		
3		
4		
5		
6		

21. Have you or your spouse ever had an electrocardiogram (ECG or EKG)? (Check only one response in each column. Check "does not apply" if information is unavailable.)

Wife	Husband
<input type="checkbox"/> No	<input type="checkbox"/>
<input type="checkbox"/> Yes	<input type="checkbox"/>
<input type="checkbox"/> Does not apply	<input type="checkbox"/>

If yes, when? (Check only one response in each column. Check "does not apply" if information is unavailable.)

Wife	Husband
<input type="checkbox"/> Within 6 months	<input type="checkbox"/>
<input type="checkbox"/> Within 1 year	<input type="checkbox"/>
<input type="checkbox"/> Within 5 years	<input type="checkbox"/>
<input type="checkbox"/> Over 5 years ago	<input type="checkbox"/>
<input type="checkbox"/> Never	<input type="checkbox"/>
<input type="checkbox"/> Does not apply	<input type="checkbox"/>

22. Have you (wife) ever had a cancer "pap" smear? ☐ yes ☐ no

☐ does not apply

If yes, when? (Check only one response)

1 ☐ at time of last pregnancy
 2 ☐ within 6 months
 3 ☐ within 1 year
 4 ☐ within 5 years
 5 ☐ over 5 years ago
 6 ☐ no cancer "pap" smear

23. Have you (wife) ever had surgery for breast cancer? (Check "does not apply" if information is unavailable.)

☐ yes ☐ no ☐ does not apply
 If yes, was the cancer found by you (wife) ☐
 (or) by doctor ☐

24. Do you (wife) now practice self-breast examination for cancer? (Check "does not apply" if information is unavailable.)

☐ yes ☐ no ☐ does not apply
 If yes, were you instructed on how to do this? ☐ yes ☐ no

25. During 1968 did you or any member of your family visit any of the following? (Check all that apply for each person.)

Person I.D.	General Practitioner	Specialist (See below and specify)	Psychi- atrist	Psychol- ogist	Eye doctor (Optom- atrist)	Public Health Nurse	Chiro- practor	Phys- ical ther- apist	Occupa- tional ther- apist	Inha- lation ther- apist	Diet- itian	Podi- atrist
Wife												
Husband												
Eldest Child												
1												
2												
3												
4												
5												
6												

Specialist:	1. Cardiologist (heart)	5. Gynecologist	9. Pediatrician
	2. Cancer specialist	6. Dermatologist	10. Surgeon
	3. Neurologist (brain)	7. Internist	11. Other
	4. Bone specialist	8. Obstetrician	

26. Do any of the following symptoms make it difficult for you or your spouse to get around? yes no
If yes, which symptoms? (Check all that apply.)

	Wife	Husband
1. Chest pain, shoulder or arm pains		
2. Palpitations (rapid heart beating)		
3. Severe shortness of breath		
4. Severe indigestion		
5. Swelling of feet or ankles		
6. Blueness of lips or fingernails		
7. Painful or swollen joints		

27. Please answer the following (Check all that apply for each person. Answer all questions YES or NO.)

Wife		Husband	
Yes	No	Yes	No

28. Have you or your spouse ever had the following? (Check all that apply for each person.)

Wife	Husband

29. Have you or your spouse ever had partial or complete paralysis of one side of the body?

Wife yes no

Husband yes no

(If "no", skip to Question 30)

If yes, did you or your spouse have any of the following?

(Be sure to answer each response "yes" or "no".)

	Wife		Husband	
	Yes	No	Yes	No
1. Unconsciousness at any time				
2. Numbness or tingling				
3. Difficulty in talking				
4. Dimming or blurring of vision				
5. Seeing double				
6. Difficulty in understanding words				
7. Confusion about where you were or about what was happening				
8. Headache				
9. Feeling of being off-balance				
10. Unsteadiness of walk				
11. Dizziness or nausea				
12. Difficulty in swallowing				
13. Sudden deafness				
14. Noise in the ears				

30. Do you or your spouse presently have any physical disability?

yes no

(If no, skip to question 31.)

If yes, Who? Wife husband both

If yes, what is the disability? Wife _____

Husband _____

If yes, please answer the following question: (Answer each question Yes or no.)

	Wife		Husband	
	Yes	No	Yes	No
1. Are you presently being treated for it?				
2. Have you ever been hospitalized or been to a hospital clinic for it?				
3. Do you need medical help now?				
4. Do you know who to contact in order to get help for rehabilitation?				
5. Do you want to work within your physical limitations?				
6. Do you want help in seeking employment?				
7. Would you be willing to move to a location where a job was available?				
8. Do you feel that with some training you could return to work or fairly normal activity?				
9. Are you now receiving financial support from a state agency?				
10. Are you now receiving city or town financial aid?				
11. Are you now receiving social security benefits?				
12. If you are not receiving any of the above forms of financial support, have you applied for them?				

31. Are there any specific family health or medical problems which you need help with now? (Check only those which the family needs help with now.)

- | | |
|-------------------------------------|--|
| 1. <u>sick child</u> | 9 <u>dental care</u> |
| 2. <u>family planning</u> | 10 <u>chronic medical conditions</u> |
| 3. <u>diet and food preparation</u> | 11 <u>clothing</u> |
| 4. <u>alcoholism</u> | 12 <u>heat</u> |
| 5. <u>water supply</u> | 13 <u>skin conditions</u> |
| 6. <u>toilet facilities</u> | 14 <u>others: (specify) _____</u> |
| 7. <u>sick wife</u> | |
| 8. <u>sick husband</u> | 15 <u>no health problems which need help with now.</u> |

32. If you checked any of the above, would you like a nurse to come to talk to you about these problems? yes no

33. Has anyone in your family ever had any of the following illnesses?
(Check only those who have had the illnesses.)

a. (Wife's family)

	Wife	Brother	Sister	Mother	Father	Grandparents
Heart attack						
High blood pressure						
Kidney disease						
Rheumatic fever						
Circulation (blood) problems						

b. (husband's family)

	Husband	Brother	Sister	Mother	Father	Grandparents
Heart attack						
High blood pressure						
Kidney disease						
Rheumatic fever						
Circulation (blood) problems						

c. (Your own children)

	Age	Sex	Age	Sex	Age	Sex	Age	Sex
Heart attack								
High blood pressure								
Kidney disease								
Rheumatic fever								
Circulation (blood) problems								

34. Is there anyone listed above who has not recently had medical attention for any of the illnesses listed above? yes no

If yes, who? (specify person) _____

If yes, what are the reasons for not receiving medical attention?
(Check all that apply.)

- 1 condition is not worse 4 afraid to go to a doctor
 2 drugstore suggested some medicine 5 no way to pay a doctor
 3 difficult to see a doctor 6 no transportation
 7 other: (specify) _____

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38. Has a doctor ever told you or your spouse that either of you needed hospitalization which you did not receive? yes no
 If yes, who? wife husband both
 If yes, for what ailment? Wife: _____
 Husband: _____

If yes, why weren't you or your spouse hospitalized? (Check all that apply for each person. Check "does not apply" if information is unavailable.)

	Wife	Husband
1. Did not believe the doctor		
2. Could not miss work		
3. Had insufficient funds		
4. Would rather not go into hospital		
5. Nobody to take care of children		
6. Felt better eventually		
7. Other: (Specify) _____		
8. Does not apply		

39. Do you fully understand the modern methods of birth control?
yes no
40. Would you use a family planning program if it were made available?
yes no
41. Would you attend "speaker and discussion" type programs on family planning if they were made available? yes no
42. Would you use pamphlets and booklets on family planning if they were made available? yes no
43. Would you like individual counseling for any problems or questions you might have regarding family planning? yes no
44. Would you like help in finding out how you and your family can get additional health services? yes no
45. Would you and your family use a community health center or health clinic if it were made available? yes no
46. Would you and your family participate in a program designed to find out if you are sick or have some illness you are unaware of (at no cost to you)? yes no
47. Would you use any of the following information booklets if they were available to you? (Check only those which you would use.)
 1 first aid 4 when to call a doctor
 2 baby care 5 how to obtain medical care and assistance
 3 minor illness in children 6 Would use none of the information booklets listed above.
48. If you were free to choose, what kind of health care would you like to have for your family? (Check only one response.)
 1 to have one doctor treat the whole family for any illness.
 2 to have several doctors available for use, for example, one for children and another one for adults
 3 to have several specialists available to see each person depending upon the nature of the illness.

49. If you were free to choose, which one would you choose? (Check only one response.)
- 1 the doctor who comes to your home to examine your child.
 - 2 the clinic where you have to take your child and where the equipment necessary for examination is available.
 - 3 the doctor whom you know you can find in his office during office hours
50. How far do you have to travel to see a dentist? (Check only one response.)
- | | |
|-------------------------------|-------------------------------|
| 1 <u> </u> less than 5 miles | 4 <u> </u> 15 to 19 miles |
| 2 <u> </u> 5 to 9 miles | 5 <u> </u> 20 to 24 miles |
| 3 <u> </u> 10 to 14 miles | 6 <u> </u> 25 miles and over |
51. Do you always go to the dentist as often as you feel you should?
 yes no
 If no, what are the reasons why you don't go to the dentist when you think you should? (Check all that apply.)
- 1 cannot pay the dentist
 - 2 fear of getting hurt
 - 3 no transportation
 - 4 dentist's office hours are inconvenient
 - 5 cannot get an appointment
 - 6 always go when I think I should
 - 7 other: (specify) _____
52. Has any dentist ever refused to treat you or any member of your family because you did not have enough money? yes no
53. Have you gone to a dentist this year (1969)? yes no
54. How many times did you or your spouse go to a dentist in 1968? (Check appropriate column for each person. Check "does not apply" if information is unavailable.)
- | Wife | Husband |
|---------------------------------------|---------|
| Once _____ | _____ |
| Twice _____ | _____ |
| Three times or more _____ | _____ |
| Did not go to a dentist in 1968 _____ | _____ |
| Does not apply _____ | _____ |
55. If you did not go to a dentist in either 1968 or 1969 when was the last time you went to one? (Check appropriate column for each person.)
- | Wife | Husband |
|---|---------|
| Two years ago (1967) _____ | _____ |
| Three years ago (1966) _____ | _____ |
| Four years ago (1965) _____ | _____ |
| Five years ago or more (1964 or before) _____ | _____ |
| Never _____ | _____ |

56. How often do you or your spouse generally see a dentist? (Check appropriate column for each person. Check "does not apply" if information is unavailable.)

Wife		Husband
	Never	
	Only when absolutely necessary	
	Regularly: once a year	
	Regularly: more than once a year	
	Does not apply	

57. What was the reason for you or your spouse seeing the dentist the last time? (Check only one response in each column. Check "does not apply" if information is unavailable.)

Wife		Husband
	Symptom of dental problem	
	Preventive (routine dental checkup)	
	Does not apply	

58. How often do you think a person should see a dentist? (Check only one response.)

1 ☐ only when absolutely necessary 3 ☐ twice a year
 2 ☐ once a year 4 ☐ three or more times a year

59. Does everyone in your family have his own toothbrush?
☐ yes ☐ no

60. Does your family use toothpaste with fluoride in it?
☐ yes ☐ no

61. What is your source of drinking water? (Check only one response.)

1 ☐ your own well 4 ☐ spring water
 2 ☐ community water 5 ☐ other: (specify) _____
 3 ☐ neighbor's well

62. If you thought any adult member of your family had the following, what would you do?

	Take to hospital visit	Call a doctor for a house visit	Make appointment at the doctor's office (visit to doctor's office)	Consult doctor on the phone	See a Nurse	Use home remedies (Maternal care)	Consult relatives, friends, or neighbors	Just wait until it goes away
1. Any sore that does not heal								
2. Vision problems								
3. Blackouts--fainting								
4. Chest pain								
5. Excessive bleeding								
6. Discharge								
7. Frequent fever								
8. Headache								
9. Lower back pain								
10. Shortness of breath								
11. Swelling of feet or ankles								
12. Persistent indigestion								
13. Blueness of lips and fingernails								
14. Palpitations								
15. A lump or thickening in the breast or elsewhere								
16. Any change in a wart or mole								
17. Difficulty in swallowing								
18. Persistent hoarseness or cough								
19. Any change in normal bowel habits								

63. We are interested in what people do themselves to take care of their health and what kinds of medicines they have in their homes. Do you have some medicines in your home such as the following: (Explain: Only medicines which have not been prescribed by a doctor. Remember to ask after each yes: "Have you or any member of your family used it/them in the last month?" If yes, check "Have, used.")

- | | | | |
|---|-------------------------------------|-------------------------------|-------------------------------------|
| 1. Salves or ointments | <input type="checkbox"/> don't have | <input type="checkbox"/> have | <input type="checkbox"/> have, used |
| 2. Tonics | <input type="checkbox"/> don't have | <input type="checkbox"/> have | <input type="checkbox"/> have, used |
| 3. Purgatives (laxatives) | <input type="checkbox"/> don't have | <input type="checkbox"/> have | <input type="checkbox"/> have, used |
| 4. Liniments | <input type="checkbox"/> don't have | <input type="checkbox"/> have | <input type="checkbox"/> have, used |
| 5. Pain killers (including aspirin, etc.) | <input type="checkbox"/> don't have | <input type="checkbox"/> have | <input type="checkbox"/> have, used |
| 6. Antiseptics (iodine, etc.) | <input type="checkbox"/> don't have | <input type="checkbox"/> have | <input type="checkbox"/> have, used |
| 7. Sleeping pills | <input type="checkbox"/> don't have | <input type="checkbox"/> have | <input type="checkbox"/> have, used |
| 8. Vitamins | <input type="checkbox"/> don't have | <input type="checkbox"/> have | <input type="checkbox"/> have, used |
| 9. Stomach settlers | <input type="checkbox"/> don't have | <input type="checkbox"/> have | <input type="checkbox"/> have, used |
| 10. Cold remedies | <input type="checkbox"/> don't have | <input type="checkbox"/> have | <input type="checkbox"/> have, used |
| 11. Cough remedies | <input type="checkbox"/> don't have | <input type="checkbox"/> have | <input type="checkbox"/> have, used |
| 12. Piles or hemorrhoid remedies | <input type="checkbox"/> don't have | <input type="checkbox"/> have | <input type="checkbox"/> have, used |
| 13. Eye drops | <input type="checkbox"/> don't have | <input type="checkbox"/> have | <input type="checkbox"/> have, used |

64. How do you meet the expenses for your family's medical care? (Check all that apply.)

- | | |
|--|--|
| 1 <input type="checkbox"/> savings | 8 <input type="checkbox"/> other medical plans |
| 2 <input type="checkbox"/> borrow from bank | 9 <input type="checkbox"/> state help |
| 3 <input type="checkbox"/> borrow from loan company | 10 <input type="checkbox"/> town help |
| 4 <input type="checkbox"/> borrow from friends | 11 <input type="checkbox"/> federal help |
| 5 <input type="checkbox"/> borrow from relatives | 12 <input type="checkbox"/> insurance |
| 6 <input type="checkbox"/> cash from household funds | 13 <input type="checkbox"/> do not know |
| 7 <input type="checkbox"/> medicare | 14 <input type="checkbox"/> other: (specify) _____ |

65. Do you have medical insurance? ☐ yes ☐ no

If yes, what type?

- | | |
|---|---|
| 1 <input type="checkbox"/> Blue Cross (hospital) | 4 <input type="checkbox"/> Commercial (private) insurance |
| 2 <input type="checkbox"/> Blue Shield (doctors) | 5 <input type="checkbox"/> other: (specify) _____ |
| 3 <input type="checkbox"/> State Aid (AFDC, AD, etc.) | 6 <input type="checkbox"/> No insurance |

SECTION III

CHILDREN'S HEALTH SECTION

(Interviewer: "Children" refers only to children 18 years of age or younger)

1. Does lack of money ever keep you from taking your children to see a doctor or dentist? ☐ yes ☐ no ☐ no children 18 or younger
2. Does the cost of prescriptions ever keep you from getting medicine of any kind for your children? ☐ yes ☐ no ☐ no children 18 or younger
3. Is it convenient for you to take your children to a doctor?
☐ yes ☐ no ☐ no children 18 or younger
 If no, why not? (Check all that apply.)
☐ 1 no care available
☐ 2 have to rely on neighbor or friend for transportation
☐ 3 doctor too busy
☐ 4 can't go during doctor's hours
☐ 5 no one to take care of the other children
☐ 6 other: (specify) _____
4. Do your children regularly get "health checkups" even when they are well? ☐ yes ☐ no ☐ no children 18 or younger
 If no, why not? (Check all that apply.)
☐ 1 don't need them
☐ 2 unable to pay the doctor
☐ 3 doctor's office hours inconvenient
☐ 4 cannot get an appointment
☐ 5 no transportation
☐ 6 no one to take care of the other children
☐ 7 other: (specify) _____
5. What immunizations (shots) have your children had? (Check all that apply for each child (eldest child first). If any child has not had any of the shots, please record only the child's name, check "no shots" and leave all of the other spaces blank.)
 Note: "Age" means "age at the time of shot," not "present age."

First Name	No shots	Small-pox (age)	Polio (age)	DPT Diphtheria Pertussis Tetanus (age)	Measles (age)	DPT Diphtheria Tetanus (age)	T. B. (age)
Eldest child 1							
2							
3							
4							
5							
6							

☐ No children 18 or younger

(Interviewer: This is a hypothetical question. Ask it whether or not the respondent has children 18 years of age or younger)

6. If you thought your child has (or had) the following, what would you do first?

	Take to a Hospital	Call a doctor for a house visit	Make appointment at the doctor's office (visit to on the doctor's office)	Consult doctor on the phone	See a Nurse	Use home remedies (Maternal Care)	Consult relatives, friends, or neighbors	Must wait until it goes away
1. Headache								
2. Cold								
3. Cough (croup)								
4. Urinary problems								
5. Constipation								
6. Rash and fever								
7. Stomach ache								
8. Very severe stomach ache								
9. Running ear								
10. Chills								
11. High fever								
12. Throwing up								
13. Whooping cough								
14. Mumps								
15. Respiratory problems								

7. Where do you take your children when they are sick or hurt?
(Check only one response.)
1. ☐ to a doctor's office
 2. ☐ to a hospital
 3. ☐ to a nurse
 4. ☐ to a nurse
 4. ☐ to a neighbor, friend or relative
 5. ☐ other: (specify) _____
 6. ☐ no children 18 or younger
8. Have your children ever been examined by a doctor or nurse at school?
☐ yes ☐ no ☐ no children 18 or younger
 If yes, when? (List eldest child first.)
- | Child | When? (dates) |
|-------|---------------|
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
9. Would you like help in finding out how often your children should be seen by a doctor, nurse, or dentist?
☐ yes ☐ no ☐ no children 18 or younger
10. Would a specially-trained nurse be acceptable to you to care for those of your children's health problems that do not require a doctor's attention?
☐ yes ☐ no ☐ no children 18 or younger
11. Would a specially-trained nurse be acceptable to you if you knew that she could discuss your children's health with a doctor at any time and that the doctor would see the children at scheduled times when well and at any time when sick?
☐ yes ☐ no ☐ no children 18 or younger

12. How long ago did your children have any of the following: (Specify for each child in order: eldest first.)
 Note: "Age" means "age at time of test," not "present age."

Child's Name	Chest X-ray (Age)	No Chest test (age)	Hearing Test (age)	No Hearing Test (age)	Vision Test (age)	No Vision Test (age)	Physical Exam (age)	No Physical Exam (age)
Eldest Child								
1								
2								
3								
4								
5								
6								
No children 18 or younger								

13. In general, what was the reason for the last time your children had the following: Check only one column for each item.)

	Symptomatic	Preventive	No test or Exam
A chest x-ray?			
A hearing test?			
A vision test?			
A physical exam?			

14. Do any of your children: (Answer each question yes or no.)
- a. ever turn blue when playing hard? yes no no children 18 or younger
- b. Squat often while playing? yes no no children 18 or younger
- c. ever have convulsions or fits? yes no no children 18 or younger
15. Do you think that any permanent harm can result when a child has an earache or has draining ears? yes no
16. Do any of your children take vitamins or mineral supplements?
- yes no no children 18 or younger
- If yes, which ones? (Check all that apply.)
- 1 Prescription from physician
- 2 Multivitamins from drugstore
- 3 Cod liver oil
- 4 Vitamins with fluoride
- 5 Vitamin C (ascorbic acid)
- 6 Other: (specify)
17. Do any of your school-age children participate in any of the following? (Check all that apply.)
- 1 school lunch program
- 2 school milk program
- 3 school breakfast
- 4 does not participate in any of these programs.
- 5 no children 18 or younger
18. How often do your children generally see a dentist? (Check only one response.)
- 1 never
- 2 only when absolutely necessary
- 3 once a year
- 4 more than once a year
- 5 no children 18 or younger
19. How often do you think your children should see a dentist? (Check only one response.)
- 1 never
- 2 only when absolutely necessary
- 3 once a year
- 4 twice a year
- 5 three or more times a year
20. What was the general reason for your children's seeing a dentist the last time? (Check only one response.)
- 1 symptom of dental problem
- 2 preventive (routine dental checkup)
- 3 no children 18 or younger
21. Do you look in your children's mouths to see if they have cavities or bleeding gums?
- yes no no children 18 or younger
22. Do you usually have candy in your home for your children?
- yes no no children 18 or younger

23. How many times did your children see a dentist in 1968? (Check the appropriate column for each child and list all children.)

Child's Name	Number of times in 1968				If not in 1968 when was the last time they saw a dentist
	Once	Twice	Three times or more	Never saw a dentist in 1968	
1					
2					
3					
4					
5					
6					

no children 18 or younger

24. Do any of your children presently have any of the following dental problems? (Check all that apply.)
- | | |
|---------------------|---------------------------------------|
| 1 <u>toothaches</u> | 3 <u>generally bad teeth</u> |
| 2 <u>cavities</u> | 4 <u>missing teeth</u> |
| | 5 <u>no dental problems presently</u> |

SECTION IV

BACKGROUND INFORMATION

1. Are you or your spouse presently employed? (Check "does not apply" if information is unavailable.)

Wife	Husband
<u>Yes</u>	
<u>No</u>	
<u>Does not apply</u>	

Wife (specify) _____

_____ does not apply

Husband (specify) _____

_____ does not apply

2. What was the last grade of school completed?

Wife _____
_____ does not apply

Husband _____
_____ does not apply

3. Are you or your spouse a member of any religion?

Wife: yes no does not apply

Husband: yes no does not apply

If yes, what is you or your spouse's religious preference?

Wife _____ Husband _____

Protestant: (specify) _____

Roman Catholic _____

Jewish _____

Other: (specify) _____

None _____

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NAME (Husband) _____
NAME (Wife) _____
ADDRESS _____
TOWN _____
DATE OF INTERVIEW _____
NAME OF INTERVIEWER _____

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